



330 North College Avenue
Indianapolis, Indiana 46202
(317) 685-6600 • Fax (317) 685-6610
1-800-508-8034
email: keramida@keramida.com
web page: www.keramida.com

**FINAL REMEDIATION WORK PLAN
FORMER GENERAL MOTORS CORPORATION
ALLISON GAS TURBINE DIVISION, PLANT 10
INDIANAPOLIS, INDIANA
IDEM VRP #6991004
KERAMIDA PROJECT NO. 2829E**

Submitted To:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Mr. William Wieringa, Project Manager
Voluntary Remediation Program
Office of Land Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

**VOLUME 1
REPORT, TABLES, FIGURES**

Submitted For:

GENUINE PARTS COMPANY
Mr. Bob Lewis
Environmental, Safety and DOT Compliance Manager
2999 Circle 75 Parkway
Atlanta, Georgia 30339

Submitted By:

KERAMIDA ENVIRONMENTAL, INC.
330 North College Avenue
Indianapolis, Indiana 46202
317/685-6600

August 16, 2004

Setting The Standard of Excellence

**FINAL REMEDIATION WORK PLAN
FORMER GENERAL MOTORS CORPORATION
ALLISON GAS TURBINE DIVISION, PLANT 10
INDIANAPOLIS, INDIANA
IDEM VRP #6991004
KERAMIDA PROJECT NO. 2829E**

Submitted To:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Mr. William Wieringa, Project Manager
Voluntary Remediation Program
Office of Land Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

Submitted For:

GENUINE PARTS COMPANY

Mr. Bob Lewis
Environmental, Safety and DOT Compliance Manager
2999 Circle 75 Parkway
Atlanta, Georgia 30339

Submitted By:

KERAMIDA ENVIRONMENTAL, INC.

330 North College Avenue
Indianapolis, Indiana 46202
317/685-6600

August 16, 2004

EXECUTIVE SUMMARY

KERAMIDA Environmental, Inc. (KERAMIDA) has completed the Final Remediation Work Plan (RWP) for the former General Motors Corporation Allison Gas Turbine Division (AGT) Plant 10 located in Indianapolis, Indiana (Site). The purpose of the RWP is to address contamination identified at the Site during due diligence and subsequent Site characterization activities, and to incorporate additional information obtained since submittal of the RWP dated October 30, 2002. Regulatory closure of the Site is being administered through the Indiana Department of Environmental Management (IDEM) Voluntary Remediation Program (VRP).

The Site characterization consisted of the collection and analysis of soil, groundwater, surface water, and sediment samples; a hydrogeological study (groundwater movement under the Site); and human health and ecological exposure assessments. Two source areas (where past industrial activity practices indicate a potential for contamination) were identified at the Site: (1) an eastern source area associated with former solvent operations, and (2) a western source area associated with historic degreasing and industrial waste burial activities. The chemicals of potential concern (COPC) identified for the Site were volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAH), cadmium, chromium, and lead. A human health risk assessment (HHRA) and a screening-level ecological risk assessment (SLERA) were performed following completion of the Site characterization to determine the level of risk to humans or the environment from the COPC.

Concurrent with the Site characterization, additional activities were conducted to further assess the identified COPC at the Site. The design and implementation of remedial measures included: (1) the removal of buried waste in the western portion of the property, (2) the removal of soil containing a VOC/lead "hot spot" along the western property boundary, and (3) installation and start-up of a groundwater remediation system in the eastern and western source areas to remedy potential PAH contamination.

On-Site Results

The results of the HHRA indicate that existing concentrations of COPC in on-Site surface soil, subsurface soil, and groundwater do not present unacceptable risks or hazards to current or potential future on-Site receptors. Existing concentrations of COPC in on-Site groundwater do not present a risk to receptors in Eagle Creek based on groundwater fate and transport modeling.

Though no unacceptable risks to human health and the environment were identified for on-Site COPC, remediation will be performed on-Site as a protective measure. In accordance with IDEM guidance, the remediation will be performed to achieve VRP Tier II Non-Residential Cleanup Goals. Various remedial technologies were screened to treat residual VOC contamination at the Site, and soil vapor extraction (SVE) combined with air sparging (AS) proved to be the most applicable technology. SVE/AS (an engineering practice to remove contaminants from soil and groundwater) is currently being performed in the western and eastern source areas. The SEV/AS system was expanded to further address the VOC "hot spot" area and excavation and disposal was conducted to address the lead component of the "hot spot" area.

In addition to the SVE/AS system, a phytoremediation system consisting of hybrid poplar trees was installed along the entire southern property line to intercept groundwater as it flows off-Site. Phytoremediation is a practice using trees to uptake and cleanse groundwater. It is anticipated that remediation will be completed in five to seven years from the time of initiation, or by 2007 to 2009.

A small area of buried waste from industrial activity will remain beneath the Plant 10 building upon the completion of remediation. A notice will be added to the property deed limiting Site use to non-residential activities, and requiring the use of personal protective equipment if excavation is conducted in the area beneath the on-Site building with remaining buried waste.

Off-Site Areas

Off-Site areas are residential areas to the east and mixed residential and commercial areas to the south. The findings of the Site characterization indicated the presence of VOCs in off-Site groundwater to the southeast and south across Little Eagle Creek. The characteristics of the VOC occurrence in the south off-Site area differed greatly from the eastern on-Site source area and are indicative of the presence of an off-Site source or sources. Off-Site soil data collected during the investigations also confirmed the presence of an off-Site source(s) to the south. IDEM has directed the off-Site responsible parties to perform an investigation of their off-Site sources to the south. This additional off-Site investigation, south of Little Eagle Creek, will be conducted to identify the sources of contaminants detected in that area and to better quantify potential associated risks.

Off-site areas to the east and to the south of the Site have been identified as having potential contamination from the Site. The existing concentrations of COPCs in off-Site groundwater may present risks and hazards that exceed target risk and hazard levels for current or potential future off-Site receptors. The Site is located within a Marion County Health Department No Well Zone, thus minimizing the potential for exposure to groundwater. The Site is not located within a wellhead protection area. An anomalous (uncharacteristic) area of contamination was noted in groundwater to the east of the Site across Olin Avenue. As a protective measure, this area will be remediated by reductive dechlorination to health protective levels. An institutional control, such as a municipal ordinance, also will be used to prevent exposure to off-Site groundwater to the east, southeast, and south of the Site.

The results of the HHRA indicate that existing concentrations of COPCs in surface water and sediment of Little Eagle Creek do not present unacceptable risks or hazards to current or potential future recreational users of the creek. The results of the SLERA indicate that no COPCs were identified for the Little Eagle Creek habitat.

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION.....	1
2.0 SITE BACKGROUND.....	2
2.1 SITE LOCATION AND HISTORY	2
2.2 PHYSICAL SETTING AND LAND USE.....	3
2.3 SITE DOCUMENTATION.....	5
2.4 IDEM COMMENT LETTER.....	8
3.0 SUPPLEMENTAL SITE INVESTIGATION	12
3.1 SOIL SAMPLING AND ANALYSIS	12
3.2 GROUNDWATER SAMPLING AND ANALYSIS	13
3.3 INVESTIGATION RESULTS.....	13
3.3.1 Hydrogeology	13
3.3.2 Soil Analytical Results.....	14
3.3.3 Groundwater Analytical Results.....	14
3.4 DISCUSSION	15
3.4.1 VOCs	15
3.4.2 PAHs.....	16
4.0 SUMMARY OF SITE CHARACTERIZATION	17
4.1 INVESTIGATION METHODS	17
4.2 BASELINE HYDROLOGIC ASSESSMENT RESULTS.....	18
4.2.1 Regional Geology	18
4.2.2 Regional Hydrogeology.....	20
4.2.3 Site Hydrogeology.....	21
4.3 SOURCES OF CONTAMINATION	23
4.3.1 Eastern Source Area	23
4.3.2 Western Source Area	25
4.3.3 Other Potential Sources	27
4.4 CHEMICALS OF CONCERN.....	30
4.4.1 TCE and DNAPL.....	31
4.4.2 PAHs.....	32
4.4.3 Metals	33
4.4.4 Surface Soil COPCs.....	33
4.4.5 Subsurface Soil COPCs	34
4.4.6 Groundwater COPCs	34
4.4.7 Surface Water COPCs	35
4.4.8 Sediment COPCs	35
4.4.9 COPC Characteristics	35
4.5 EXTENT OF CONTAMINATION	35
4.5.1 Eastern Source Area	35
4.5.2 Western Source Area	37
4.6 ECOLOGICAL ASSESSMENT	39
4.6.1 Environmental Setting	39
4.6.2 Data Evaluation and Identification of COPCs.....	40
4.6.3 Conclusions.....	41
5.0 RISK ASSESSMENT	41
6.0 CLEANUP CRITERIA SELECTION	42
6.1 SURFACE SOIL	42
6.2 SUBSURFACE SOIL	42

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
6.3 GROUNDWATER.....	43
6.4 SURFACE WATER.....	44
6.5 SEDIMENT.....	44
7.0 STATEMENT OF WORK.....	44
7.1 OBJECTIVES OF REMEDIAL ACTION.....	44
7.2 SUMMARY.....	45
7.3 SITE SAFETY PLAN.....	45
7.4 QUALITY ASSURANCE PROJECT PLAN.....	46
8.0 REMEDIATION PLAN.....	46
8.1 BURIED WASTE REMOVAL ACTION.....	46
8.2 GROUNDWATER REMEDIATION PLAN.....	47
8.2.1 Development and Screening of Remedial Alternatives for Source Areas.....	47
8.2.2 Remedial Technologies Screened for Source Areas.....	48
8.2.2.1 Soil Vapor Extraction.....	48
8.2.2.2 Air Sparging.....	49
8.2.2.3 Groundwater Pump and Treat.....	49
8.2.3 Treatability Investigation for Source Areas.....	50
8.2.3.1 Soil Vapor Extraction.....	50
8.2.3.2 Air Sparging.....	51
8.2.4 Selected Remedial Technology for Source Areas.....	51
8.2.5 Remediation System for Source Areas.....	51
8.2.5.1 Remediation System Design.....	52
8.2.5.2 Remediation System Permitting and Disposal.....	54
8.2.5.3 Remediation System Implementation.....	54
8.2.6 Off-Site Groundwater Remediation Evaluation.....	55
8.2.6.1 South Off-Site Area.....	55
8.2.6.2 East Off-Site Area.....	56
8.3 VOC AND LEAD SOIL "HOT SPOT" REMEDIATION.....	60
8.3.1 Remediation Screening Alternatives.....	60
8.3.1.1 Soil Vapor Extraction.....	60
8.3.1.2 Excavation and Off-Site Disposal.....	60
8.3.2 Selected Remedial Technology.....	61
8.3.3 Remediation System.....	61
8.4 MONITORING/CONFIRMATION SAMPLING PLAN.....	63
8.4.1 Remediation System Monitoring Plan.....	63
8.4.1.1 SVE/AS Portion.....	63
8.4.1.2 Phytoremediation.....	63
8.4.1.3 Selective On-Site Groundwater Monitoring.....	64
8.4.2 On-Site Groundwater Monitoring Plan.....	64
8.4.3 Plume Stability Groundwater Monitoring Plan.....	65
8.5 DATA MANAGEMENT.....	65
9.0 OPERATION AND MAINTENANCE PLAN.....	66
9.1 NORMAL OPERATION & MAINTENANCE.....	66
9.1.1 Operation and Monitoring Tasks and Schedule.....	66
9.1.2 Maintenance Tasks and Inspection Schedule.....	67

<u>Section</u>	<u>Page</u>
9.1.2.1 Phytoremediation	67
9.1.2.2 Other	68
9.1.3 Optimum Operating Conditions.....	68
9.1.4 Waste Management	69
9.1.5 Health & Safety	69
9.2 POTENTIAL OPERATING PROBLEMS	69
9.2.1 Potential Sources of Operational Problems	69
9.2.2 Common Remedies of Operational Problems	70
9.3 CONTINGENCY OPERATION & MAINTENANCE PLAN.....	70
9.3.1 Alternative Operational Procedures.....	70
9.3.2 Notification Procedures	70
10.0 COMMUNITY RELATIONS	71
10.1 AFFECTED PROPERTY OWNERS.....	72
10.2 COMMUNITY ORGANIZATIONS	73
10.3 SAMPLE NOTICE.....	73
10.4 LOCAL GOVERNMENT UNITS	74
10.5 LOCAL NEWSPAPERS.....	75
10.6 PUBLIC REPOSITORY	75
11.0 COMPLETION OF REMEDIAL ACTION.....	75
12.0 SCHEDULE	75
13.0 COST ESTIMATE	76
14.0 USE OF REPORT	76
15.0 LIMITATIONS	76
16.0 REFERENCES	78

FIGURES

- 1 Site Location Map
- 2 Site Map
- 3 Expanded Site Map
- 4 Aerial Photograph
- 5 Site and Surrounding Area Use Map
- 6 Soil Boring Location Map
- 7 Monitoring Well Location Map
- 8 Creek Sampling Location Map
- 9 Geologic Cross-Section Location Map
- 10 Supplemental Geologic Cross Section Map
- 11a Geologic Cross Section A-A'
- 11b Geologic Cross Section B-B'
- 11c Geologic Cross Section C-C'
- 11d Geologic Cross Section D-D'
- 11e Geologic Cross Section E-E'
- 11f Geologic Cross Section F-F'
- 11g Geologic Cross Section G-G'
- 12a Groundwater Potentiometric Surface Map – Shallow Wells, February 28, 2000
- 12b Groundwater Potentiometric Surface Map – Shallow Wells, November 7, 2000
- 12c Groundwater Potentiometric Surface Map – Shallow Wells, June 20-21, 2001
- 12d Groundwater Potentiometric Surface Map – Shallow Wells, July 24, 2001
- 12e Groundwater Potentiometric Surface Map – Shallow Wells, January 30, 2002
- 12f Groundwater Potentiometric Surface Map – Shallow Wells, July 15-22, 2002
- 12g Groundwater Potentiometric Surface Map – Shallow Wells, December 2003
- 12h Groundwater Potentiometric Surface Map – Shallow Wells, March 2004
- 12i Groundwater Potentiometric Surface Map – Shallow Wells, June 2004
- 12j Groundwater Potentiometric Surface Map – Deep Wells, January 30, 2002
- 12k Groundwater Potentiometric Surface Map – Deep Wells, July 15-22, 2002
- 12l Groundwater Potentiometric Surface Map – Deep Wells, December 2003
- 12m Groundwater Potentiometric Surface Map – Deep Wells, March 2004
- 12n Groundwater Potentiometric Surface Map – Deep Wells, June 2004
- 13a Surface Soil Analytical Results Map for VOCs
- 13b Surface Soil Analytical Results Map for PAHs
- 13c Surface Soil Analytical Results Map for Metals
- 14a Subsurface Soil Analytical Results Map for On-Site VOCs
- 14b Subsurface Soil Analytical Results Map for Off-Site VOCs
- 14c Subsurface Soil Analytical Results Map for PAHs
- 14d Subsurface Soil Analytical Results Map for Metals
- 15a Shallow Groundwater Analytical Results Map for TCE
- 15b Shallow Groundwater Analytical Results Map for cis-1,2-DCE
- 15c Shallow Groundwater Analytical Results Map for VC
- 15d Shallow Groundwater Analytical Results Map for PAHs
- 15e Shallow Groundwater Analytical Results Map for Lead
- 16a Deep Groundwater Analytical Results Map for Cis-1,2-DCE
- 16b Deep Groundwater Analytical Results Map for VC
- 16c Deep Groundwater Analytical Results Map for PAHs
- 16d Deep Groundwater Analytical Results Map for Lead
- 17 Creek Sampling Analytical Results Map

- 18 PCE in Off-Site Soil and Groundwater Summary Map
- 19 Geophysical Anomalies and Test Trench Location Map
- 20 Removal Action Excavation Area Map
- 21 Remediation System Layout with Utilities
- 22a Microcosm Study Results – TCE vs. Time
- 22b Microcosm Study Results – Initial Aqueous TCE vs. TOC
- 22c Microcosm Study Results – Final TCE vs. TOC
- 23 TCE/Lead Remediation Area Layout and Confirmation Sample Locations
- 24 Proposed Groundwater Monitoring Plan
- 25 Detailed Project Schedule

TABLES

- 1 City Directory Search
- 2 Supplemental Investigation Sampling and Analysis Plan
- 3a Water Level Data – Upper Sand Unit
- 3b Water Level Data – Lower Sand Unit
- 3c Water Level Data – Little Eagle Creek
- 4 Calculated Vertical Hydraulic Gradients
- 5 Calculated Horizontal Hydraulic Gradients
- 6a Surface Soil Analytical Results for VOCs (mg/kg)
- 6b Surface Soil Analytical Results for PAHs (mg/kg)
- 6c Surface Soil Analytical Results for Metals (mg/kg)
- 7a Subsurface Soil Analytical Results for VOCs (mg/kg)
- 7b Subsurface Soil Analytical Results for PAHs (mg/kg)
- 7c Subsurface Soil Analytical Results for Metals (mg/kg)
- 8a Geoprobe® Groundwater Analytical Results for VOCs (µg/L)
- 8b Geoprobe® Groundwater Analytical Results for PAHs (µg/L)
- 8c Geoprobe® Groundwater Analytical Results for Metals (µg/L)
- 9a Shallow Monitoring Well Groundwater Analytical Results for VOCs (µg/L)
- 9b Shallow Monitoring Well Groundwater Analytical Results for PAHs (µg/L)
- 9c Shallow Monitoring Well Groundwater Analytical Results for Metals (µg/L)
- 10a Deep Monitoring Well Groundwater Analytical Results for VOCs (µg/L)
- 10b Deep Monitoring Well Groundwater Analytical Results for PAHs (µg/L)
- 10c Deep Monitoring Well Groundwater Analytical Results for Metals (µg/L)
- 11a Surface Water Analytical Results for VOCs (µg/L)
- 11b Sediment Analytical Results for VOCs (mg/kg)
- 12a Excavation Confirmation Surface Soil Analytical Results for VOCs (mg/kg)
- 12b Excavation Confirmation Surface Soil Analytical Results for PAHs (mg/kg)
- 12c Excavation Confirmation Surface Soil Analytical Results for Metals (mg/kg)
- 13a Excavation Confirmation Subsurface Soil Analytical Results for VOCs (mg/kg)
- 13b Excavation Confirmation Subsurface Soil Analytical Results for PAHs (mg/kg)
- 13c Excavation Confirmation Subsurface Soil Analytical Results for Metals (mg/kg)
- 14 Microcosm Study Results
- 15 Hot Spot Soil VOCs Analytical Results
- 16 Hot Spot Soil Lead Analytical Results

ATTACHMENTS

VOLUME 2

- 1 IDNR Water Well Information
- 2 Wellhead Protection Areas Information
- 3 Marion County Health Department No Well Zone Information
- 4 IDEM RWP Comment Letter
- 5 Dry Cleaner Regulatory Information
- 6 KERAMIDA Standard Operating Procedures
- 7 Quality Assurance Project Plan
- 8 Health and Safety Plan
- 9 Soil Boring Logs
- 10 Monitoring Well Logs and Construction Details

VOLUME 3

- 11 Laboratory Analytical Reports
- 12 Waste Disposal Documentation
- 13 Hydrographs
- 14 Contaminants of Concern List
- 15 Human Health Risk Assessment
- 16 Ecological Risk Assessment
- 17 Remedial Design Calculations
- 18 Phytoremediation Papers
- 19 Construction Manual and Construction Manual Drawings

VOLUME 4

- 20 Remedial Equipment and Enclosure Specifications
- 21 Remediation System Boring and Well Construction Logs
- 22 NEPCCO – Groundwater Remediation System O&M Manual
- 23 MCHD Water Well Test Results
- 24 KERAMIDA Operation & Maintenance Logs, Tables and Forms

**FINAL REMEDIATION WORK PLAN
FORMER GENERAL MOTORS CORPORATION
ALLISON GAS TURBINE DIVISION PLANT 10
INDIANAPOLIS, INDIANA
IDEM VRP #6991004
KERAMIDA PROJECT NO. 2829E**

1.0 INTRODUCTION

KERAMIDA Environmental, Inc. (KERAMIDA) was contracted by Genuine Parts Company (Genuine Parts) to design and implement remedial actions to mitigate identified contamination at the former General Motors Corporation Allison Gas Turbine Division (AGT) Plant 10 in Indianapolis, Indiana (Site). Regulatory closure of the Site is being administered through the Indiana Department of Environmental Management (IDEM) Voluntary Remediation Program (VRP). The purpose of this report is to provide a remediation work plan (RWP) consistent with the July 1996 VRP Guidance that will:

- Identify the chemicals of potential concern (COPCs).
- Summarize the sources and extent of contamination.
- Discuss contaminant exposure pathways and potential risks to human health and the environment.
- Provide cleanup criteria and objectives.
- Provide a remediation plan that will discuss the remedial alternatives evaluation, present the selected remedial alternative(s), and an operation and maintenance plan for the selected alternative(s).
- Provide a health and safety plan (HASP) and quality assurance project plan (QAPP) for the remediation.
- Provide a community relations plan.
- Outline a project schedule and cost estimate.

It should be noted that soil and groundwater remedial actions have already been performed at the Site in response to the findings of the Site characterization. The groundwater remedial action continues to the present and is being monitored through routine operation and maintenance activity. Therefore, the on-Site groundwater remedial technology selection and detailed system

design and operation sections of this RWP document a remedy that is currently implemented and operating.

2.0 SITE BACKGROUND

Section 2.1 provides information on the Site location and history; Section 2.2 presents information on the physical setting and land use of the area; Section 2.3 presents a summary of available documentation of investigation activities at the Site; and Section 2.4 presents a summary of IDEM comments on the initial RWP submitted for the Site (KERAMIDA report dated October 30, 2002) and KERAMIDA's responses.

2.1 SITE LOCATION AND HISTORY

The subject property is located at 700 North Olin Avenue in Indianapolis, Marion County, Indiana (see Figure 1). The property is the Site of the former General Motors Corporation Allison Gas Turbine Division (AGT) Plant 10. The original facility building was constructed in 1956 and was expanded westward in 1970 to double the floor space. The expansion consisted of a concrete storage pad with a metal roof, which was later enclosed in 1990.

Prior to 1956, the property was vacant land. Between 1956 and 1973, BHT Corporation (BHT) operated the facility for carburetor and brake re-manufacturing. General Motors purchased the property from BHT in 1973 and used the facility for warehousing of obsolete machines, tooling, and fixtures until the mid-1980s, at which time the property became part of the AGT Division. Subsequent to the sale of the property to General Motors, BHT through acquisition and merger became a part of Genuine Parts. AGT continued to use the facility for warehousing until December 1993 when the property was sold to the Allison Engine Company (AEC). AEC sold the facility to Associated Properties, Inc. in 1998. Associated Properties, Inc. sold the facility to American Art Clay Company, Inc. in 2002 (current property owner). American Art Clay Company uses the facility for excess materials storage for a portion of the building and leases the rest of the building to other companies for storage and commercial business.

2.2 PHYSICAL SETTING AND LAND USE

The Site is located on the southwest side of Indianapolis and consists of approximately 5.4 acres of land developed with one approximately 80,000-square foot building. The building is bordered by a fence on the north and paved driveway and parking areas on the east, south, and west. The operational area of the Site is bounded by a chain-link fence, and locking access gates are located on the east and west sides of the property. No water supply wells, basements, or other subsurface structures are present on-Site. On the south side of the property a brushy strip of land extends to the tree line along the bank of Little Eagle Creek. The surface topography over most of the Site is relatively flat. The southern third of the Site slopes moderately to the south, towards Little Eagle Creek until a berm of approximately three feet of height. The berm is located along the wooded area and was created during the leveling of the southern parking lot. Little Eagle Creek flows in a southeasterly direction and converges with Eagle Creek approximately 6,500 feet south-southeast of the Site. Site elevations range from approximately 715 feet above mean sea level (AMSL) at the north end of the property to 705 feet AMSL near Little Eagle Creek. Site maps showing salient Site features are presented in Figures 2 (Site Map) and 3 (Expanded Site Area Map). An aerial photograph of the Site is presented in Figure 4.

The property is zoned industrial. Land use in the surrounding area is mixed use with zoning predominantly residential, general business, and industrial. The property is bordered by a city park (Olin Park) to the north; a residential neighborhood to the east; a wooded area, Little Eagle Creek, and Michigan Meadows Apartments to the south; and Holt Road and an Allison Transmission Plant to the west. Features of the surrounding area are presented in the Site and Surrounding Area Use Map (Figure 5).

Available drilling logs of low and high-capacity water wells on record at the Indiana Department of Natural Resources (IDNR), Division of Water were reviewed. A total of approximately 160 low capacity wells were identified as being located within a one mile radius of the Site, the nearest of which lies approximately 1,000 feet north (upgradient) of the property). The wells are completed within limestone bedrock, clay, or sand and gravel units at depths ranging from 30 (clay or sand/gravel) to 270 (limestone) feet below grade (bg). Fourteen low-capacity wells are located south (downgradient) of the Site within a one-mile radius along Cossell Road and Vermont Street. These wells range in depth from 36 to 270 feet bgs and are also completed in either sand and gravel, clay, or limestone bedrock. The majority of the high-capacity water wells

identified are located to the north, west and south of the Site. A total of 17 high capacity wells were identified within a one-mile radius of the Site. The nearest of these wells is approximately 1,400 feet northwest of the Site along Little Eagle Creek (cross-gradient). No high-capacity water wells were identified south (downgradient) of the Site between the Site and Eagle Creek. Well logs and location maps obtained from IDNR are presented in Attachment 1.

Potable water is supplied to the greater Site area by either the Indianapolis Water Company (IWC) or the Town of Speedway municipal water supply. These entities obtain their water supply from numerous wells in the area, the majority of which are located along Eagle Creek approximately 1.5 miles west (upstream) of the Site. These utilities were contacted to determine which residences along Olin Avenue, Luett Avenue, Cossell Road, and Michigan Street in the greater Site area are serviced by municipal water. The utilities reported no records of service for the following addresses:

- Olin Avenue – 709
- Luett Avenue – 601, 605
- Cossell Road – 3908, 3910

A house-to-house survey of local residences along the east side of Olin Avenue and the west side of Luett Avenue was conducted by the Marion County Health Department (MCHD) in December of 1996. MCHD found a single domestic well located at 709 North Olin Avenue. The construction of the well is unknown. This well was not one of those identified in the IDNR well records. Only well logs completed by the drillers and submitted to IDNR are found in their files. The location of this domestic well is provided on Figure 3. The well was sampled and analyzed for VOC by the MCHD on January 2, 1997; July 14, 1997; March 9, 1998; July 25, 1998; February 25, 1999; June 15, 1999; and September 29, 1999. The only VOC detected at any time was octamethylcyclotetrasiloxane at 4.0 parts per billion in March of 1998. This compound has not been detected at the Site.

Marion County wellhead protection information was reviewed to determine if the Site was located within a wellhead protection area. Five wellhead protection areas currently exist in Marion County (Attachment 2). The Site is not located within a designated wellhead protection area. Geographically, the Site is located between the Riverside Wellhead Protection Area and the Speedway Wellhead Protection Area.

The Site is located in Marion County Health Department (MCHD) No Well Zone (NWZ) Area 2. No Well Zones are designated by the MCHD and reflect zones of contaminated groundwater identified by the MCHD through its routine sampling of potable wells throughout Marion County. The MCHD began building a groundwater quality database and identifying these zones in the late 1990's. Currently seven NWZs have been designated. The MCHD requires permits for all water supply wells in the county. According to the MCHD, permits are not granted to install potable wells in NWZs. Permits for other types of wells such as industrial supply wells may be granted in NWZs on a case-by-case basis. NWZ information is included in Attachment 3.

2.3 SITE DOCUMENTATION

Engineering Science, Inc. (ESI) conducted two environmental investigations at the Site in 1992 and 1993. The initial investigation was documented in the report entitled *Phase I Information Review Report for General Motors Corporation Allison Gas Turbine Division* (Phase I) dated July 1992. The Phase I assessment involved no intrusive exploration of environmental conditions. The Phase I assessment identified the following potential areas of environmental concern at the Site:

- A reported release of 100 gallons of quench oil in the southwest corner of the property.
- A reported release of an unknown amount of hydraulic fluid in the southwest courtyard.
- Possible buried waste at western end of property.
- Possible dumping near the northwest corner of the building.

The Phase I identified the Plant 10 Site as a potential area of concern (PAOC). The report included a recommendation to install three monitoring wells and one soil boring at the Site.

An intrusive follow-up assessment of the PAOCs identified during the Phase I assessment was completed by ESI in November of 1993. Methods and results of the additional investigation were reported in a document entitled *Phase II Site Assessment Final Report for General Motors Corporation Allison Gas Turbine Division* (Phase II) dated November 19, 1993. During the

initial phase of work, three monitoring wells (MW-132, MW-133, and MW-135) were installed and one soil boring (SB-134) was advanced at the Site. A soil gas survey was completed on the western side of the property during this investigation. During the second phase of this investigation four monitoring wells (MW-145 through MW-148) were installed and two soil borings (SB-149 and SB-150) were advanced on-Site.

Results of the investigation identified trichloroethene (TCE), vinyl chloride (VC), total 1,2-dichloroethene (1,2-DCE), tetrachloroethene (PCE), toluene, and methylene chloride in on-Site soil. Compounds most frequently detected included TCE, total 1,2-DCE, and VC. The western side of the Site was confirmed as a PAOC during the Phase II investigation, however the source was unknown.

O'Brien and Gere Engineers, Inc. (OBG) conducted a Buyer Environmental Assessment for the Site in March of 1994. OBG advanced six soil borings (SB-10-1 through SB-10-5 and OBG-10-1) and installed one monitoring well MW-10-1 in soil boring OBG-10-1. Two surface soil samples were collected near an area containing brake pad pieces, two brake pad samples were collected for asbestos testing, and two sludge samples were collected from sumps located south of the building (these sumps were later removed; however, no known environmental information exists regarding their removal). Analytical results for the surface soil samples collected is not available. A total of six subsurface soil samples and three groundwater samples were collected and analyzed for volatile organic compounds (VOCs) and Resource Conservation and Recovery Act (RCRA) metals. VOCs detected in the subsurface soil included total 1,2-DCE and TCE. Metals detected in subsurface soil included arsenic, barium, cadmium, chromium, lead, mercury, and selenium. The analytical results for the three groundwater samples are not available. One groundwater sample was apparently collected from well MW-10-1 and analyzed for VOCs. VOCs detected in MW-10-1 included trans-1,2-DCE, cis-1,2-DCE, and TCE.

Between June 1995 and January 1997, Fluor Daniel GTI, Inc. (FDGTI) conducted additional investigation activities to further assess the magnitude and extent of contamination at the Site, to collect additional hydrogeological data, and to perform a baseline human health risk assessment. Work performed by FDGTI included the installation and sampling of fourteen additional monitoring wells at both on-Site and off-Site locations, soil and groundwater sample collection via push-probe methods (e.g. Hydropunch® and Geoprobe®), Little Eagle Creek stream gauging and surface water sampling, and aquifer slug testing. Results of FDGTI's work are documented

in the *Feasibility Study Report* (FDGTI 1997a) and the *Remedial Investigation Report* (FDGTI 1997b). Those reports were prepared prior to Genuine Part's involvement in the project and therefore complete copies are not available.

KERAMIDA was retained by Genuine Parts in 1997 to design and implement remedial actions to mitigate contamination at the Site. KERAMIDA submitted to IDEM an RWP dated October 30, 2002. IDEM reviewed the RWP and provided comments in a "Remediation Work Plan Review" letter dated July 23, 2003 (Attachment 4). Comments made by IDEM requiring further action included the following:

- Demonstration of an additional source(s) of VOCs south of Little Eagle Creek.
- Investigation of the anomalous dissolved TCE occurrence east of the Site.
- Investigation of the anomalous dissolved polynuclear aromatic hydrocarbons (PAHs) occurrence east of the Site.
- Implementation of the proposed TCE/Lead "Hot Spot" soil treatment at the western property boundary.
- Remediation of a residual lead "Hot Spot" in soil in the southwest corner of the Site.
- Establishment of a downgradient monitoring point.

A meeting was held between KERAMIDA and IDEM on August 8, 2003 to discuss the comments and resolutions. In the meeting, a sampling plan was developed to investigate the anomalous dissolved TCE and PAH occurrence(s) east of the Site. It was also decided that MW-169D would serve as the downgradient monitoring point and no additional wells would be required. Investigation of the anomalous TCE and PAH occurrences was completed in late August 2003. Expansion of the southwest remediation system to the TCE/Lead "Hot Spot" was completed in September 2003.

A second meeting was held with IDEM on October 3, 2003 to present findings of the supplemental investigation and remediation system expansion. During the meeting, additional information was requested by IDEM regarding the No Well Zone ordinance.

KERAMIDA prepared an RWP Addendum, dated November 13, 2003 to document activities completed to address the comments made by IDEM in the July 23, 2003 letter and subsequent meetings. The RWP Addendum included the following:

- Responses to individual IDEM comments contained in the July 23, 2003 letter.
- Results of the supplemental investigation to the east of the Site.
- Results of remediation of the TCE/Lead "Hot Spot".
- No Well Zone ordinance documentation.
- Technical summary of all comment responses.

2.4 IDEM COMMENT LETTER

Responses to comments contained in the IDEM July 23, 2003 RWP Review letter are presented below. The IDEM comments are italicized and the KERAMIDA responses are in regular text font. The IDEM letter is included in Attachment 4.

Page 2, paragraph 5; "South of Little Eagle Creek, TCE is absent from the ground water and the detected VOC concentrations are greatest in the deep zone of the upper sand unit. The characteristics of dissolved VOC occurrence in this area differ greatly from the eastern source area of the Site and are indicative of the presence of an off-Site source or sources." At the top of page 3, KERAMIDA states that additional off-Site investigation should be performed to identify sources of contamination and to better quantify risks. IDEM does not agree that the changes in ground water contamination are necessarily indicative of an additional source or sources. The other VOCs present are daughter products of TCE and it is not unreasonable to find them further from the known source area with an absence of TCE. Another source is possible, particularly with respect to the VOC detection in soil at the Michigan Apartments, but there is not conclusive data to attribute the VOCs to another source.

KERAMIDA agrees that VC and cis-1,2-DCE occurrence in the groundwater beneath Michigan Meadows Apartments could, at least in part, be attributable to the Site. Another possible source of VOC contamination has been identified south of the Site (Figure 3). The possible source is a dry cleaner, formerly located in the Michigan Plaza Shopping Center, identified during a regulatory search (Attachment 5) and city directory search (Table 1) conducted by KERAMIDA. According to city directories, the dry cleaner operated as Neff and Accent Cleaners at 3819 Michigan Street from 1970 until the 1990s. Regulatory files indicate that PCE was used by the

facility and generated as a waste product. PCE has been identified in subsurface soil and groundwater in the vicinity of the former dry cleaner and at the south end of the Michigan Meadows Apartments during investigation of the Site (Figures 14b and 18).

Based on the locations and detected concentrations of PCE, a probable source of VOC contamination south of Little Eagle Creek is the former dry cleaner. Indoor air sampling at the Michigan Meadows Apartments and the Michigan Plaza Shopping Center by the property owner (AIMCO) also indicates a source of PCE is present at the Michigan Plaza Shopping Center (Mundell and Associates 2003). IDEM also concluded that a probable source of VOC contamination is present at the Michigan Plaza Shopping Center. Upon review of the AIMCO indoor air sampling report, IDEM assigned an incident number (#730026) to the apparent release and, in a letter dated July 1, 2003, notified the owners of Michigan Plaza Shopping Center that further investigation of the Site is prudent and regulatory oversight for the investigation would be managed by the State Cleanup Program. A copy of the IDEM letter is also included in Attachment 5. An investigation of the apparent PCE release should be conducted by the responsible party(ies) to determine the nature and extent of PCE and any daughter products (e.g. TCE, DCE and VC) and its contribution to VOC occurrence in the subsurface at the Michigan Meadows Apartments. VC and cis-1,2-DCE occurrence in groundwater beneath Michigan Meadows Apartments could, at least in part, be attributable to the Site.

Page 21, paragraph 3: "An anomalous area of dissolved TCE occurrence is noted at the location of MW-163 and KB-1 ... the cause of the elevated TCE at this location is uncertain and seemingly not associated with the Site." These data points are near MW-162, where sampling has verified low levels of PAH in ground water. All of the samples are across Olin Avenue and within 50 feet of the Site's east property behind that house where MW-162 is located (Figure 12d). There is no information provided to substantiate on off-Site source. Keramida needs to further investigate to demonstrate that this "anomalous" area of TCE contamination has no connection with this Site.

During the August 8, 2003 meeting held between KERAMIDA and IDEM, it was agreed that four additional borings would be advanced for the investigation. The borings were to be located north of MW-162 along Olin Avenue (one boring), in an alley east of MW-162 and northeast of MW-163 (two borings), and along Olin Avenue south of MW-163 (one boring). Soil and

groundwater samples were to be collected from the borings and analyzed for VOCs and PAHs. KERAMIDA performed the supplemental investigation in August of 2003, and Section 2.0 of this RWP details the findings and conclusions of the investigation. In summary, the anomalous occurrence of dissolved TCE in this area appears to be limited in extent and associated with the sanitary sewer system. The relationship of TCE to the sanitary sewer is not known but it is possible that former operations at the Site contributed to its occurrence. As a proactive measure, Genuine Parts Company has decided to mitigate VOC occurrence in this area. The Remedial Alternates Evaluation for this area is presented in Section 8.2.6.2 of this RWP.

On page 19, in paragraph 3, Keramida vaguely discusses the occurrence of PAH. IDEM agrees that the on-Site detections of PAH are inconsequential, but off-Site at the location of MW-162, there have been detections of nine PAH in June 2001 and July 2002. This coincides with the area of off-Site TCE contamination discussed in the previous comment. As stated in the previous comment, further investigation is necessary.

KERAMIDA has performed a subsurface investigation to address this comment. Section 3.0 of this RWP details the findings and conclusions of the investigation. In summary, PAHs were detected in groundwater at greater concentrations further hydraulically upgradient of well MW-162 and, therefore, appear to originate from an off-Site source. Findings of the supplemental investigation indicate that no further investigation of PAH occurrence by Genuine Parts Company is warranted.

Page 16, paragraph 2: During confirmation sampling after the excavation and disposal of soil in the western area, a hotspot of TCE and lead was discovered. Due to the expense of off-Site disposal of soil with elevated TCE, Keramida proposed to lower the TCE content with ASVE and then excavate and dispose of the reduced amount of soil off-Site when it can be characterized primarily for the lead content. This is a practical approach and should be implemented.

KERAMIDA has implemented remediation of the TCE/Lead "Hot Spot." TCE and lead impacted soils were removed during a recent expansion of the remedial system to address the "Hot Spot" area. Confirmation sampling conducted during soil removal indicates that the lead and TCE occurrences have been mitigated. Residual TCE contamination is currently being

addressed by the remediation system. Recent remedial activities within the "Hot Spot" are documented in Section 8.3 of this RWP.

Page 24, paragraph 3: Keramida states that lead in the soil above the Tier II Non-Residential Cleanup Goals (1,000 ppm) has been removed by excavation, except for the KB-33 hotspot and the area under the building. However, in Figure 11d, there is a sample result of 1,400 ppm from the floor of an excavation identified as A1 Floor 2 (May 2001). Previously, Keramida stated that deeper excavation was deemed not possible due to access limitations. Keramida needs to explain the details of the access limitations and the alternatives to meeting the VRP standards. This was also discussed in the meeting held previous to this report preparation.

KERAMIDA agrees that lead contamination exists at or near A1 Floor 2 above the Tier II Non-Residential Cleanup Goal. Because of the location and placement of the Air Sparge/Soil Vapor Extraction (AS/SVE) System piping, immediate removal of lead-impacted soils in this area is not practical. As agreed by the IDEM during the October 3, 2003 meeting, lead in soil removal will be conducted once AS/SVE treatment is completed.

Figure 13b, Deep Ground Water Analytical Results Map For Vinyl Chloride: The complete horizontal extent of vinyl chloride contamination is not known, as evidence by the detections of 8.7 and 6.4 ppb in January and July 2002, respectively, in MW-169D. Keramida has proposed to use a combination of plume stability monitoring and a risk assessment as a closure for the vinyl chloride contamination. Plume stability monitoring requires establishing and maintaining down-gradient monitoring points to demonstrate plume stability. At least one additional monitoring well is necessary down-gradient from MW-169D. If a down-gradient monitor well does not remain uncontaminated, plume stability will be disproved and an alternative remedy will be necessary.

As agreed upon during the August 8, 2003, meeting, MW-169D will act as the necessary downgradient monitoring point within the plume stability monitoring well network. MW-169D contains barely detectable concentrations of VC. A well installed further downgradient would likely not contain detectible VC concentrations. Per IDEM guidance, an evaluation of plume

stability requires detectable concentrations of the COPCs in the perimeter of compliance wells seventy five percent (75%) of the time in order to demonstrate plume stability (IDEM 2001). As also discussed during the meeting and in the response to a previous IDEM comment, well MW-169D is located downgradient of the dry cleaner formerly located at the Michigan Plaza Shopping Center. Possible daughter products of the PCE used at the facility include TCE, DCE, and VC. An investigation of the former dry cleaner by the responsible party(ies) should be conducted to determine what contribution the facility has on VOC occurrence south of Little Eagle Creek and the compliance point.

3.0 SUPPLEMENTAL SITE INVESTIGATION

In August 2003, KERAMIDA performed a Supplemental Site Investigation to address the IDEM comments related to the anomalous presence of TCE and PAHs east of the Site as discussed above. The following sections detail the field methods used, soil and groundwater analytical results, conclusions of the investigation, and proposed recommendations. All investigation activities were conducted according to the KERAMIDA Standard Operating Procedures (SOPs) presented in Attachment 6 and the QAPP presented in Attachment 7.

3.1 SOIL SAMPLING AND ANALYSIS

A total of four soil borings (KB-48, KB-49, KB-50, and KB-51) were advanced at the Site on August 29, 2003 using a bobcat-mounted Geoprobe® percussive rig. Figure 6 shows the boring locations. The soil borings were completed under the direct supervision of Mr. Steve Cobb, Project Scientist with KERAMIDA. Prior to field activities, KERAMIDA contacted the Indiana Underground Pipe Protection Service (IUPPS), who located and marked the underground utilities located at the Site. A safety meeting, including review of the Site HASP, was performed at the beginning of field activities. The HASP is presented in Attachment 8.

The borings were continuously sampled in 4-foot segments, logged for soil type and visual indication of contamination, and field screened for organic vapors with a photo-ionization detector (PID). One subsurface soil sample was collected from each boring for laboratory analysis. The rationale for the boring locations, total depths of the borings, depths from which the soil samples were collected, and the analyses performed are presented in Table 2.

The samples were submitted to Test America Inc., of Indianapolis, Indiana, under proper chain-of-custody protocol for VOC analysis by EPA Method 8260B and for PAH analysis by EPA Method 8310. One duplicate sample and one matrix spike/matrix spike duplicate (MS/MSD) sample were collected for laboratory quality assurance and control (QA/QC). Disposable sampling equipment was utilized and, therefore, no equipment blank samples were collected. The laboratory samples were submitted for Level IV QA/QC documentation. Method reporting limits less than or equal to the Tier II Residential Cleanup Goals were requested from the laboratory.

3.2 GROUNDWATER SAMPLING AND ANALYSIS

One groundwater sample was collected from each boring. The groundwater samples were collected using the Advanced Geoprobe® Water Sampler through a four-foot temporary screen installed with the Geoprobe®. The groundwater samples were submitted to Test America Inc., of Indianapolis, Indiana, under proper chain-of-custody protocol for analysis of VOCs by EPA Method 8260B and for PAH by EPA Method 8310. One duplicate sample and one MS/MSD sample were collected for laboratory QA/QC. A trip blank was submitted with the samples and analyzed for VOCs only. Disposable sampling equipment was utilized and, therefore, no equipment blank samples were collected. The laboratory samples were submitted for Level IV QA/QC documentation. Method reporting limits less than or equal to the Tier II Residential Cleanup Goals were requested from the laboratory.

3.3 INVESTIGATION RESULTS

The following sections describe Site geologic conditions encountered during the Supplemental Investigation and the soil and groundwater analytical results.

3.3.1 Hydrogeology

Borings advanced during this investigation encountered a surficial silt loam or sand loam. The surficial loam was generally less than six feet thick and was underlain predominantly by sand. Alternating lenses of silt loam and sand loam were encountered in the sand unit to the boring completion depths of twenty to twenty four feet below ground surface (bgs). Logs for the borings advanced during the investigation are provided in Attachment 9.

Groundwater was encountered in the borings at depths ranging from approximately 12 to 20 feet bgs. Although the flow direction of the groundwater could not be determined from the borings, previous monitoring of wells located in this area indicate a generally southerly flow direction (see Tables 3a through 3c).

3.3.2 Soil Analytical Results

The soil analytical results are presented in Tables 7a and 7b and depicted on Figures 14b and 14c. The Tier II Cleanup Goals are provided at the bottom of the tables for comparison with detected concentrations. All soil samples were collected from a depth greater than two feet bgs; therefore, Tier II Cleanup Goals for Subsurface Soil were used in the comparison. All soil analytical results are based on dry weight. Laboratory analytical reports and chain-of-custody documentation are included in Attachment 11.

Table 7a presents a summary of soil VOC analytical results. Methylene Chloride was detected in all five soil samples at concentrations above the Tier II Residential Cleanup Goal for Subsurface Soils. Sample KB-51(14-16) was the only sample containing detectable concentrations of any other VOCs. Trichloroethene was detected in soil sample KB-51(14-16) at a concentration above its Tier II Residential Cleanup Goal. Cis-1,2-DCE and trans-1,2-DCE were detected in KB-51(14-16) at concentrations below their respective Tier II Residential Cleanup Goal. The VOC detections are presented on Figure 14b.

Table 7b presents the soil PAH analytical results. Soil sample KB-48(12-14) contained detectable concentrations of twelve PAH compounds at levels below their respective Tier II Residential Cleanup Goals. No PAHs were detected in the remaining soil samples. The PAH concentrations are presented on Figure 14c.

3.3.3 Groundwater Analytical Results

Groundwater analytical results are presented in Tables 8a and 8b and depicted on Figures 15a through 15d. The Tier II Residential Cleanup Goals are provided at the bottom of each table for comparison with detected concentrations. Laboratory analytical reports and chain-of-custody documentation are included in Attachment 11.

Table 8a presents the groundwater VOC analytical results. Groundwater sample KB-51W was the only sample with detectable concentrations of VOCs. TCE and cis-1,2-DCE were detected in this sample at concentrations greater than their respective Tier II Residential Cleanup Goals. The trip blank contained a detectable concentration of bromodichloromethane. This constituent has not been identified as a contaminant of concern at the Site. The VOC concentrations are presented on Figures 15a through 15c.

Table 8b presents the groundwater PAH analytical results. Groundwater sample KB-48W was the only sample with detectable concentrations of PAHs. Ten PAH compounds were detected in this sample, and six of the PAHs were detected at concentrations greater than their respective Tier II Residential Cleanup Goals. The PAH concentrations are presented on Figure 15d. All laboratory reporting limits were less than or equal to the Tier II Residential Cleanup Goals with the exception of benzo(a)anthracene. The Tier II Residential Cleanup Goal for benzo(a)anthracene is 0.10 micrograms per liter ($\mu\text{g/L}$) and the laboratory reporting limit for the groundwater analysis was 0.20 $\mu\text{g/L}$. In light of the findings of the supplemental investigation, this reporting level exceedance does not appear to be significant.

3.4 DISCUSSION

3.4.1 VOCs

Methylene chloride was detected in all five soil samples. No identifiable concentration gradient or pattern is apparent that would indicate the source. All of the soil samples were collected from a depth just above the observed soil-groundwater interface and likely within the zone of groundwater fluctuation (smear zone). It should be noted that methylene chloride is a common laboratory contaminant. Although it was not detected in the laboratory quality control samples, it is possible that it is a laboratory artifact. Based on the depth of detection (> 12 feet bgs), direct contact with contaminated soils by area residents and workers is improbable. Even if residents or workers did come in contact with contaminated soils, the detected concentrations are well below the direct contact cleanup goal for a residential scenario. The direct contact cleanup goal for a residential scenario is calculated to be 85.3 mg/kg using the 1996 VRP Resource Guide Tier II equations. Construction workers installing utility conduits in the public right-of-ways could come in contact with contaminated soil. Based on a comparison of detected concentrations with allowable exposure concentrations for construction workers, there would be no unacceptable risk to them.

Methylene chloride was not detected in any of the groundwater samples. In fact, methylene chloride has only been detected once in all of the groundwater samples collected during characterization of the Site. The sample was collected in 1997 from MW-155 located along the western (upgradient) property boundary. If present in the soil, methylene chloride does not appear to be adversely impacting groundwater.

Volatilization of methylene chloride to indoor air does not appear to be a concern at the Site. Although there are limited data available to evaluate the pathway, an indirect analysis can be performed. Similar methylene chloride concentrations were detected in subsurface soils at the Site including the western source area. Soil vapor effluent from the remediation systems has never contained detectable methylene chloride concentrations. The laboratory reporting limit for the samples has always been less than the default EPA target soil gas concentration of 150 ppbv for a 10^{-5} risk factor (EPA 2001).

TCE and daughter products were detected in soil and groundwater samples collected south (downgradient) of well MW-163. As previously discussed, the soil sample was collected from the apparent smear zone. Soil analytical data are not available for MW-163. Groundwater data from MW-163 and the recent push-probe samples indicate that the anomalous TCE occurrence is limited to the area of the intersection of Olin Avenue and Walnut Street. Well MW-163 is located near a sanitary sewer junction vault present under Olin Avenue. The sewer flows south along Olin Avenue and then turns at the junction vault to flow east along Walnut Street. Locations of the sanitary sewer line and the junction vault are illustrated on Figure 2. Based on the findings of the investigation, the junction vault is the likely source of the anomalous TCE occurrence at MW-163. The source of the TCE associated with the sanitary sewer is not known, but it is possible that former operations at the Site contributed to its occurrence. As a proactive measure, Genuine Parts has decided to mitigate VOC occurrence in this area.

3.4.2 PAHs

PAHs were detected in soil and groundwater only at boring KB-48 located north of MW-162. The soil sample was collected from a depth just above the observed soil-groundwater interface and likely within the zone of groundwater fluctuation (smear zone). This groundwater sample contained more individual PAH compounds, and they were detected at greater concentrations

than in groundwater samples collected from MW-162. The PAH analytical results in groundwater, including historical detections in MW-162, are illustrated in Figure 15d. Soil boring KB-48 was advanced hydraulically upgradient of MW-162, therefore, based on the soil and groundwater analytical results it is apparent that the source(s) of PAHs detected in MW-162 is located north of the Site. Therefore, no further investigation by Genuine Parts is necessary.

4.0 SUMMARY OF SITE CHARACTERIZATION

The following sections summarize the methods and findings of the Site investigation activities including: (1) methodologies; (2) the hydrogeology of the Site and surrounding area; (3) the identified sources of contamination; (4) the chemicals of concern; (5) the extent of contamination; and (6) potential ecological receptors at the Site and surrounding area.

4.1 INVESTIGATION METHODS

The investigation methodologies generally incorporated directed sampling in known or suspected source areas. Site-wide sampling was also conducted to obtain necessary data for closure of the entire Site. Investigation methods followed the KERAMIDA SOPs presented in Attachment 6. The QAPP and HASP are presented in Attachments 7 and 8, respectively. Copies of all soil boring logs and monitoring well logs are provided in Attachments 9 and 10, respectively. Waste disposal documentation is presented in Attachment 12.

Soil, groundwater, sediment, and surface water sample analytical data are provided in Tables 6 through 11 and on Figures 13 through 17. These tables and figures are color-coded to assist in presentation and interpretation of the data. Data coded red indicates that the detected COPC concentration is greater than the Tier II Non-Residential Cleanup Goals. Information coded blue indicates that the concentration is greater than the Tier II Residential Cleanup Goal but less than the Tier II Non-Residential Cleanup Goal. Information coded green indicates that the detected COPC concentration is less than the Tier II Residential Cleanup Goal. Finally, information coded black indicates that the COPC was not detected in that sample. The laboratory reports and chain-of-custody documentation are provided in Attachment 11.

4.2 BASELINE HYDROLOGIC ASSESSMENT RESULTS

This section describes the Site hydrogeological setting based on available reference literature and findings of the Site characterization.

4.2.1 Regional Geology

Indianapolis lies within the Tipton Till Plain physiographic unit of the Central Drift Plain physiographic zone. The Central Drift Plain is composed of a nearly flat glacial till plain, approximately 12,000 mi² in extent, that covers central Indiana. It is underlain by thick till that has been slightly eroded by postglacial streams. The glacial sediments of the till plain were deposited during the pre-Illinoian and Illinoian Age when glaciers covered the northern three-quarters of Indiana. The glaciers deposited a minimum of eight till units, which make up approximately 75% of the deposits in the Tipton Till Plain (USGS 1994).

Glacial drift in Marion County can be divided into three units and ranges in thickness from 15 feet to over 400 feet, with an average thickness of 140 feet (Hartke et al., 1980). The Wisconsinan Drift extends from the ground surface to depths from 15-150 feet bgs. The average thickness of the Wisconsinan Drift is 50-70 feet. Underlying the Wisconsinan Drift is the Illinoian Drift. Located at elevations of 553-765 feet AMSL, the Illinoian Drift thickness ranges in thickness from 12-104 feet, and averages 30-50 feet in thickness. Beneath the Illinoian Drift, lies the Kansan Drift. The surface elevation of the Kansan drift is approximately 675 feet AMSL and drift thickness averages 30-50 feet, but it can be as thick as 200 feet (Harrison, 1963).

In Marion County, only Wisconsinan till materials are known to be exposed at the surface, with thin deposits of modern alluvium overlying the till in some stream valleys (Hartke et al., 1980). The bedrock/till interface averages 100 feet bgs. Glacial Till in Indiana is successively underlain by Late Devonian/Early Mississippian Age shales and siltstones 500-1,000 feet thick, Devonian dolomite and limestone up to 250 feet thick, Silurian limestone and dolomite 200-600 feet thick, late Ordovician shale and limestone 500-1,500 feet thick, Middle Ordovician limestone, dolomite, and sandstone, 50-450 feet thick, which unconformably overlie lower Ordovician dolomite of 20-4,500 feet thickness, Cambrian sandstones, with some siltstone and shale, 1000-3000 feet thick, and finally Precambrian crystalline basement rocks, at depths of 3,000-6,000 feet (USGS 1994).

In the vicinity of the Site in western Indianapolis, the glacial drift ranges from 50-150 feet thick and is immediately underlain by the New Albany Shale. This black and greenish-gray shale is early Mississippian to Devonian in age and ranges from 0-250 feet thick, averaging 90-140 feet. Beneath the New Albany Shale, lie rocks of the Muscatatuck Group, specifically, the North Vernon Limestone Formation and the Jefferson Limestone Formation. Rocks of the Muscatatuck Group are predominantly of middle Devonian Age and average 75 to 125 feet in thickness. The Muscatatuck Group is underlain by rocks of Silurian age that average over 150 feet thick. These rocks include the Wabash Formation, the Louisville Limestone, the Waldron Shale, Limberlost Dolomite, and the Salamonie Dolomite. The Silurian rocks are successively underlain by shale and limestone of Cincinnati age, the Trenton Limestone, Cambrian, and PreCambrian rocks (Gray et al., 1979).

Soils within the area of the Site are of the Miami-Crosby Association and the Urban land-Fox-Ockley Association. The Miami-Crosby Association is found in slightly to moderately dissected upland plains, between broad ground moraines and bottom land, or between terraces and outwash plains. The association is composed of approximately 60% Miami soils, 20% Crosby soils, and 20% assorted minor soils. The Miami soils grade from a silt loam at the surface to a silty clay loam, to a clay loam, to a loam with depth. They form on nearly level to moderately steep slopes, are well drained, and are located on the sides and tops of hills and knolls. The Crosby soils grade from silt loam at the surface to silty clay loam, to clay loam, to a loam with depth. They form on nearly level to gently sloping land, are somewhat poorly drained, and are located on irregularly shaped flats and broad ridgetops. The minor soils of this association include Brookston, Genessee, Henepin, and Shoals (USDA, 1991).

The Urban land-Fox-Ockley Association is found on broad outwash plains and terraces adjacent to larger bottom land. The association is composed of approximately 33% urban land, 25% Fox soils, 7% Ockley soils, and 32% assorted minor soils. Urban land soils are soils "covered by streets, parking lots, buildings, and other structures that obscure or alter the soil so that identification is not feasible". Fox soils grade from loam at the surface, to sandy clay loam, to gravelly clay loam, to gravelly sand and sand with depth. Fox soils are well-drained, moderately deep over gravelly sand and sand, and are nearly level to moderately sloping. They form on broad, irregularly shaped flats, on sides of drainageways and knolls, and on breaks adjacent to bottom land. The Ockley soils grade from silt loam at the surface, to silty clay loam, to clay loam, to gravelly clay loam, to gravelly sand and sand with depth. They are well drained, deep,

nearly level to gently sloping, and are found on broad, irregularly shaped flats and on short side slopes of drainageways and low knolls. Minor soils in this association include Martinsville, Rensselaer, Sleeth, Westland, and Whitaker (USDA, 1991).

4.2.2 Regional Hydrogeology

The Site lies within the White River Basin, a drainage basin 5,603 mi² in size with an average topographic elevation of 750 feet. The White River Basin overlies the Illinois Basin and the Cincinnati Arch. Bedrock strikes north-northwest, and dips to the southwest into the Illinois Basin; except in the northeastern part of the White River Basin where the Cincinnati Arch is present and where the rocks dip northward into the Michigan Basin (USGS, 1994). The principal direction of drainage in the White River Basin is towards the White River, which has an average discharge of 1,478 cubic feet per second (cfs). Major secondary drainageways are into Eagle Creek, with an average discharge of 146 cfs, and into Fall Creek with an average discharge of 270 cfs (Harrison, 1963). The Site is located in the Little Eagle Creek drainage basin, which drains an area of 26.9 square miles (Hoggatt, 1975) and flows from north to south to discharge into Eagle Creek approximately 6,500 feet south-southeast of the Site.

Three aquifer types occur in Indianapolis: surficial sand and gravel aquifers, buried and discontinuous sand and gravel aquifers, and carbonate bedrock aquifers. The most productive aquifers are the surficial sand and gravel aquifers, which can yield up to 2000 gallons per minute (gal/min) and are the major sources of water for the city of Indianapolis. The surficial sand and gravel aquifers are restricted to major river valleys in the White River Basin. The aquifers range in thickness from 50-100 feet, have hydraulic conductivities ranging from 24-1,500 feet per day (ft/d), and can yield 10-2,000 gal/min (USGS, 1994).

Buried and discontinuous sand and gravel aquifers formed in outwash plain deposits, in valley fill in pre-Illinoian valleys, as thin sheets of stratified drift, and in small pockets of coarse grained glaciolacustrine sediment. These aquifers range in thickness from 5-50 feet, have an average hydraulic conductivity of 433 ft/d, and yield 10-250 gal/min (USGS, 1994).

Carbonate Bedrock aquifers are composed of Devonian, Silurian, and Ordovician rocks, ranging in thickness from 40-300 feet (USGS, 1994). Hydraulic conductivity is extremely variable and is contingent on the fracture density and the degree of weathering of the rock (USGS, 1994). The

average estimated hydraulic conductivity for these aquifers is 13.4 ft/d. Well yields of over 100 gal/min are possible (USGS, 1994).

4.2.3 Site Hydrogeology

Consistent with the baseline geological information, groundwater at the Site occurs in sand and sand-and-gravel out-wash deposits hydraulically stratified by confining layers of silty clay. Two hydrostratigraphic units have been investigated at the Site. The uppermost hydrostratigraphic unit is comprised of sand and sand-and-gravel containing discontinuous layers of silty clay and is encountered beneath approximately 15 feet of surficial fill materials and silty clay. This sand unit extends to approximately 40 to 50 feet bgs. The subjacent hydrostratigraphic unit is comprised of silty clay with thin, inter-bedded, water-bearing sand layers. This silty clay unit separates the upper sand unit from lower water-bearing units observed in well logs from surrounding water well records. Geologic cross-sections A-A' through G-G' (Figures 9, 10, and 11a through 11g) depict the generalized subsurface geology at the Site.

Groundwater level measurements have been collected at the Site since 1995 from monitoring wells installed in both the sand unit and silty clay unit. Table 3 presents a summary of historic water level and groundwater elevation data. The groundwater elevation in the upper sand unit since 1995 has ranged from a low of 695.58 feet AMSL in MW-169D in July 2002 to a high of 702.75 in MW-148 in February 1997. The average groundwater elevation in the upper sand unit since 1995 is 698.90 feet AMSL (approximately 13 to 15 feet bgs). The average groundwater level fluctuation is approximately 1.4 feet during the year. The groundwater elevation in lower silty clay unit ranged from a low of 699.28 feet AMSL in MW-302 in November 1999 to a high of 700.68 in MW-202 in February 1997. The average groundwater elevation in the lower silty clay unit since 1995 is 699.29 feet AMSL. Hydrographs for individual wells are presented in Attachment 13.

Monitoring wells have been installed at various elevations (i.e. shallow wells versus deep wells) within the upper sand unit and lower silty clay unit. Calculated vertical gradients between shallow and deep wells over time are summarized in Table 4. The vertical gradient was calculated by dividing the difference in water level in feet between the shallow and deep well of a monitoring well pair by the distance between their respective screen mid-points. The mid-point of the shallow well screen was calculated by determining the saturated screen thickness and adding half of that thickness to the elevation of the screen bottom. As seen in Table 4, slight

upward and downward gradients have been observed between shallow and deep monitoring wells completed in the upper sand unit. Overall, the average vertical gradient in the upper sand is neutral (-0.0009). A more pronounced downward gradient (0.01) is consistently observed within the lower silty clay unit between wells MW-202 and MW-302 and comparing the upper sand unit (MW-153) and the lower silty clay unit between wells MW-153 and MW-202/MW-302.

The water level data were used to prepare the interpretive groundwater potentiometric surface maps for the shallow and deep monitoring wells. Shallow zone potentiometric surface maps are present as Figures 12a through 12i. The deep zone potentiometric surface is presented as Figures 12j through 12n. The maps present the groundwater potentiometric surface from February 2000 through June 2004. As shown in these figures, groundwater flows in a general southeasterly direction. A more southerly flow component is observed in the western portion of the Site, which turns increasingly eastward towards the eastern portion of the Site and neighboring residential area. Horizontal gradients over time in the shallow zone were calculated and are summarized in Table 5. The horizontal gradient is generally between 0.01 and 0.001 with an average of 0.0066.

Surface water elevations in Little Eagle Creek were collected from stream gauges located at Holt Road and Olin Avenue, concurrent with water level measurements collected from on-Site wells on July 24, 2001 and January 30, 2002. Both the groundwater elevations and surface water elevations are included on Figures 12d and 12e. As seen in Figure 12d, the groundwater potentiometric surface appears to coincide with the surface water elevation of Little Eagle Creek indicating that groundwater is discharging to Little Eagle Creek. In contrast, surface water elevations presented in Figure 12e are higher than groundwater elevations in the vicinity of Little Eagle Creek. These data indicate that Little Eagle Creek also periodically recharges the upper sand unit. The potential for groundwater discharge into Little Eagle Creek is also depicted in geologic cross-sections A-A' and B-B' (Figures 11a and 11b). Figures 12j and 12k present the groundwater potentiometric surface in the deep monitoring wells based on the January 30, 2002 and July 15-22, 2002 water level data, respectively. As seen in these figures, groundwater flow in the deep zone also trends to the south-southeast. The hydraulic gradient in the lower sand was calculated at approximately 0.0025.

Aquifer slug tests were conducted by FDGTI in wells screened within the shallow zone of the upper sand unit, the deep zone of the upper sand unit, and the lower silty clay unit to estimate the hydraulic conductivity (K). Resulting K values were estimated at 137 ft/d for the shallow zone of the upper sand unit, 9.1 ft/d for the deep zone of the upper sand unit, and 0.012 ft/d for the lower silty clay unit. Additional information regarding the slug test methods and analysis used by FDGTI can be found in the Remedial Investigation Report (FDGTI 1997b). Based on the estimated hydraulic conductivity, groundwater seepage velocity of the shallow and deep zone of the upper sand unit was calculated using the equation:

$$v_s = k I / n_e$$

Where: v_s = groundwater seepage velocity (ft/d)
 k = hydraulic conductivity (ft/d)
 I = hydraulic gradient (unitless)
 n_e = effective porosity (unitless)

Based on an average K value of 137 ft/d, a hydraulic gradient of 0.0066, and an assumed effective porosity of 0.25, the estimated groundwater seepage velocity in the shallow zone of the upper sand unit is calculated at 3.62 ft/d. Based on an average K value of 9.1 ft/d, a hydraulic gradient of 0.0025, and an assumed effective porosity of 0.25, the estimated groundwater seepage velocity in the deep zone of the upper sand unit is calculated at 0.091 ft/d.

4.3 SOURCES OF CONTAMINATION

Two primary source areas of contamination have been identified at the Site and are referred to as the eastern source area and the western source area.

4.3.1 Eastern Source Area

The eastern source area is thought to be associated with what appears to have been former solvent operations located near the southeastern corner of the building. The exact nature of historic operations and potential contaminant release mechanisms in this area are not known. A former solvent storage tank existed in a partially sub-grade concrete structure that was located outside along the facility wall in this area. General Motors removed the solvent tank and concrete structure in the 1990's. Documentation of this removal is not available, although based

on soil data collected since that time the removal of the tank and structure mitigated any source material in this area.

4.3.2 Western Source Area

The western source area is associated with former parts degreasing operations and waste burial activities located in the western portion of the Site. It is reported that after degreasing, parts were placed outside on racks to dry. It is thought that solvent dripping from the drying parts provided a release mechanism to the surface and subsurface. In addition, waste parts, grindings, and other materials used in Site operations were buried en masse or in drums in this area. A geophysical survey conducted in the western source area indicated several waste burial areas (Figure 19). The waste burial and parts drying locations encompass a geographical area of approximately 1.75 acres.

Exploratory trenching was conducted in each geophysical anomaly area to determine the presence of buried waste. The trenching confirmed the presence of buried waste in anomaly areas A1 through A6 and A8. The aggregate of these areas is approximately 23,000 square feet (approximately 0.5 acres). The identified buried waste (approximately 10,000 tons) was removed and properly disposed between April and July of 2001. Confirmation soil sampling conducted during the removal action verifies that all source material in the identified burial areas was removed.

During the removal action, it was observed that buried waste in area A3 extended beneath the building. Soil borings placed inside the building revealed that the buried waste extended beneath the building approximately 100 feet to the east and approximately 75 north from the southwest corner of the building. The average thickness of the buried waste was about three feet. Based on these dimensions, it is estimated that approximately 1,100 tons of waste remains beneath the building (Figure 14c). Removal of the waste is not feasible without demolition of the building. An exposure prevention remedy is proposed for this area.

Subsequent to the removal action, a small area (e.g. "hot spot") of elevated TCE and lead in soil was discovered at KB-33 along the western property boundary during a Site-wide soil investigation in May 2001. During August 2002, soil sampling was conducted to further delineate the "hot spot". All boring installation and sampling activities were completed in accordance with the KERAMIDA SOPs in Attachment 6. Boring logs are provided in Attachment 9. A series of step out borings was placed around KB-33. The soil borings were continuously sampled on two-foot intervals and each sample was screened for volatile vapors using a PID. Select subsurface soil samples were collected from five of the borings (KB-40, KB-

44, KB-45, KB-46 and KB-47) based on the PID readings and analyzed for VOCs by EPA Method 8260. Each two-foot subsurface soil interval was analyzed for total lead by EPA Method 6010. Additional sampling occurred in September 2002 due to a laboratory error. It was necessary to re-sample boring locations KB-40, KB-44, KB-45, and KB-46. Laboratory analytical results for the soil samples are presented in Tables 7a and 7c, and in Figures 14a and 14d. Cross Sections illustrating the findings are provided in Figures 11f and 11g. Based on the results of the supplemental sampling, the TCE "hot spot" was determined to be less than 30 feet in diameter and the lead "hot spot" was determined to be less than 10 feet in diameter. The approximate areal extents of the TCE and lead "hot spots" are illustrated on Figures 14a and 14d. Vertically, TCE occurrence in soil declined an order of magnitude from the fill materials to the native silt loam. Lead occurrence also declined orders of magnitude in the native soil. In general, the "hot spot" was limited to the near-surface fill materials around KB-33. This area is addressed further in Section 8.3 of this RWP.

During the August 2002 mobilization, additional work was completed to further characterize VOC occurrence in groundwater south of the western source area. All well installation and groundwater sampling activities were completed in accordance with the KERAMIDA SOPs in Attachment 6. Boring logs and monitoring well logs are provided in Attachments 9 and 10. A monitoring well pair consisting of MW-172S (shallow) and MW-172D (deep) was installed within the cul-de-sac on Cossell Road. One groundwater sample collected from each well (Figure 7). One Geoprobe groundwater sample was also collected from KB-39 south of Michigan Street and West of Olin Avenue adjacent to the trailer park (Figure 6). The groundwater samples were analyzed for VOCs by EPA Method 8260B. Laboratory analytical results for the groundwater samples are presented in Tables 8a and 9a and in Figures 15a through 15c. No VOCs were detected in the groundwater samples from monitoring well MW-172D or boring KB-39. Acetone was detected in the groundwater sample from monitoring well MW-172S at a concentration below its Tier II Residential Cleanup Goal. No other VOCs were detected in the sample from MW-172S. The results of this sampling and historical groundwater sampling indicate that VOCs above the Tier II Non-Residential Cleanup Goal do not extend to the trailer park or the Cossell Road cul-de-sac areas.

4.3.3 Other Potential Sources

The Site is located in an area with a long history of heavy industrial activity. Given the land use of the surrounding area, available information related to environmental concerns in the area of the Site was reviewed to assess the potential for other sources of COPCs found at the Site. The information search consisted of a review of historic aerial photographs, MCHD files, USEPA and IDEM files, city directories, and an environmental database search conducted by Environmental Data Resources, Inc.

Five properties located in close proximity to the Site were identified as potential additional sources of COPCs. These include the Allison Transmission facility located immediately to the west across Holt Road, United Station #6122 located northwest of the Site, the Marathon Oil Terminal located north of the Site, the Coca Cola Bottling facility located to the south, and the former dry cleaner located in the Michigan Plaza Shopping Center south of the Site.

Petroleum hydrocarbon contamination was documented at four of these Sites. Information of environmental concern related to a historic hazardous waste dump at the Allison Transmission Plant 3 was obtained from a CERCLIS Preliminary Assessment Report dated August 27, 1986 and a State Board of Health office memorandum dated August 16, 1985. These documents indicated that potentially hazardous materials such as transite boards (asbestos), foundry sand, sodium hydroxide, scrap metal, heavy metal hydroxides, solvents, and industrial trash resulting from plating, polishing, and manufacturing operations may be located at that Site underneath approximately 20 feet of fill. Other documentation included an IDEM incident reporting log dated June 14, 1988 documenting a release of an unknown quantity of PCE from an underground storage tank (UST) located at Allison Transmission Plant 12.

The dry cleaner, formerly located in the Michigan Plaza Shopping Center, was identified during a regulatory search (Attachment 5) and city directory search (Table 1) conducted by KERAMIDA. According to city directories, the dry cleaner operated as Neff and Accent Cleaners at 3819 Michigan Street from 1970 until the 1990s. USEPA and IDEM records indicate that PCE was used by the facility and generated as a waste product. Indoor air sampling at the Michigan Meadows Apartments and the Michigan Plaza Shopping Center by the property owner (AIMCO) also indicated a source of PCE is present at the Michigan Plaza Shopping Center (Mundell and Associates 2003). IDEM also concluded that a probable source of VOC contamination is present at the Michigan Plaza Shopping Center. Upon review of the AIMCO

indoor air sampling report, IDEM assigned an incident number (#730026) to the apparent release and, in a letter dated July 1, 2003, notified the owners of Michigan Plaza Shopping Center that further investigation of the Site is prudent and regulatory oversight for the investigation would be managed by the State Cleanup Program. A copy of the IDEM letter is also included in Attachment 5.

Historic aerial photographs dated 1941, 1950, 1956, 1962, and 1972 were reviewed to evaluate surrounding land activity over time. The aerial photographs showed the progression of the building expansions at both the Site and Allison Transmission. Land use south of the Site at the current Michigan Meadows Apartments appeared to remain undeveloped until construction of the apartments, which occurred sometime between 1962 and 1972. No other indications of potential industrial operations were noted in the immediate Site area.

In addition to potential sources identified by the information search, off-Site soil, groundwater, and indoor air data collected by KERAMIDA and others indicate that VOC contamination detected south of Little Eagle Creek is, at least in part, attributable to an off-Site source or sources. Soil samples collected from vadose soils on the Michigan Meadows Apartment and Michigan Plaza Shopping Center properties contained PCE and TCE at concentrations indicating an off-Site source (Figures 13a and 14b). The maximum detected concentration of PCE in soil was behind the Michigan Plaza Shopping Center approximately 1,150 feet from the Site (Figure 14b). The concentration was an order of magnitude greater than the maximum detected concentration in the 176 soil samples collected from the Site. PCE has only been detected in approximately 9% of the soil samples at the Site. When detected, PCE is generally present at trace levels. None of the detections exceeded the Tier II Non-Residential Cleanup Goal for PCE. The infrequent and trace-level detections of PCE in soil at the Site indicate that this solvent was not used at the former facility and that it was an impurity in the TCE solvent used. This conclusion is substantiated by information gathered during interviews with former employees. The information indicates PCE was never used at the Site.

TCE is generally absent in groundwater immediately south of Little Eagle Creek (Figure 15a). Groundwater samples collected from boring KB-23 and monitoring well MW-168, approximately 900 feet south of the Site near the Michigan Plaza Shopping Center, contained TCE. No other samples collected south of Little Eagle Creek, including those from between the Site and that location, contained TCE. Most notably, well MW-165 located just across Little

Eagle Creek from well MW-161 and screened in the same interval, has never contained a detectable TCE concentration even though MW-161 has contained up to 4,300 ug/L dissolved TCE.

Well MW-168 is located in the general vicinity of sample locations KB-17 and KB-24 where PCE and TCE were detected in vadose zone soil. PCE was detected in groundwater from MW-168 at a concentration near its Tier II Non-Residential Cleanup Goal (Table 9a). No other off-Site well has contained a detectable dissolved PCE concentration. PCE was detected in the groundwater only one in any one on-Site monitoring well during ten years of monitoring. On-Site well MW-132 contained PCE in February 2000 at a concentration less than that detected in MW-168 (Table 9a).

The PCE and TCE daughter (breakdown) products cis-1,2-DCE and VC have been detected in groundwater south of Little Eagle Creek at concentrations that are orders of magnitude greater than those detected on-Site at similar depth intervals in the lower portion of the sand unit (Figures 15b and 15c). These compounds are generally absent in on-Site groundwater at this depth interval. The dissolved daughter product detections in the deep zone of the sand unit at MW-165 and MW-166, located at the Michigan Meadows Apartments, are orders of magnitude greater than those detected in shallow groundwater at the same locations (Figures 16a and 16b). Organic vapor measurements taken from saturated soil samples during installation of wells MW-165 and MW-166 confirm this observation. PID readings are generally low (< 10 parts per million) in the shallow portion of the water bearing sand unit. Maximum concentrations of organic vapors were detected in soil samples collected from the base of the sand unit. By contrast, PID readings in soil taken during the installation of monitoring wells north of Little Eagle Creek (MW-161) indicate declining VOC vapors with depth to the underlying silty clay. The lowest concentrations were detected at the silty clay interface. Monitoring well construction records indicating PID measurements are provided in Attachment 10.

Dissolved cis-1,2-DCE and VC migrating from the Site would move laterally under Little Eagle Creek. No significant vertical gradients have been identified in the water-bearing sand unit that would cause dissolved contamination to be advectively transported vertically (Table 4) to the lower zone. Since dissolved concentrations of cis-1,2-DCE and VC are greater in the deeper portion of the sand unit, diffusive transport of the compounds from the shallow to deep zone is also not apparent. No migration of dense non-aqueous phase liquid (DNAPL) from the Site has

occurred. In addition, if DNAPL were present in the lower portion of the sand unit off-Site, it should be present at detectable concentrations. No TCE has been detected off-Site in the lower portion of the sand unit. Dissolved cis-1,2-DCE and VC in the shallow groundwater off-Site also appear to be, at least in part, a result of an off-Site source. Concentrations of these compounds are lowest in MW-165 immediately across Little Eagle Creek from the Site and increase to the south onto the apartment complex property (MW-166).

Based on the locations and detected concentrations of PCE, a probable source of VOC contamination south of Little Eagle Creek is the former dry cleaner. As previously discussed, indoor air sampling at the Michigan Meadows Apartments and the Michigan Plaza Shopping Center by the property owner also indicates a source of PCE is present at the Michigan Plaza Shopping Center (Mundell and Associates 2003). IDEM also concluded that a probable source of VOC contamination is present at the Michigan Plaza Shopping Center. An investigation of the apparent PCE release should be conducted by the responsible party(ies) to determine the nature and extent of PCE and any daughter products (e.g. TCE, DCE and VC) and its contribution to VOC occurrence in the subsurface at the Michigan Meadows Apartments. VC and cis-1,2-DCE occurrence in groundwater beneath Michigan Meadows Apartments could however, at least in part, be attributable to the Site.

4.4 CHEMICALS OF CONCERN

The following human-health risk-based screening levels were used to evaluate the available media-specific data and to develop the list of COPCs for the Site:

- On-Site Surface Soil - VRP Tier II Non-Residential Cleanup Goals for Surface Soil.
- On-Site Subsurface Soil - VRP Tier II Non-Residential Cleanup Goals for Subsurface Soil.
- Off-Site Subsurface Soil - VRP Tier II Residential Cleanup Goals for Subsurface Soil.
- On-site Groundwater - VRP Tier II Non-Residential Cleanup Goals for Groundwater.
- Off-Site Groundwater - VRP Tier II Residential Cleanup Goals for Groundwater.
- Off-Site Surface Water - VRP Tier II Residential Cleanup Goals for Groundwater.
- Off-Site Sediment - VRP Residential Cleanup Goals for Surface Soil.

VRP does not list screening levels for some chemicals analyzed for the Site. Therefore, the following additional sources were consulted for screening levels:

- EPA Drinking Water Maximum Contaminant Levels (MCL) (EPA 2002b)
- EPA Region 9 Preliminary Remediation Goals (EPA 2000b)
- EPA Region 3 Risk-Based Concentration Tables (EPA 2002a)

Tables 6 through 11 list the analytical data for the Site and the media-specific screening levels. The maximum detected concentration of each chemical in each medium was compared to the appropriate screening level. Those chemicals exceeding one or more screening levels were retained as COPCs for the Site. The following sections present a discussion of the analytical results relative to the screening levels, first for classes of chemicals, and then for individual media. A list of the COPCs retained for the Site is presented in Attachment 14.

4.4.1 TCE and DNAPL

Extensive Site characterization activities have been completed and indicate a minimal presence of DNAPL in the subsurface. VOC occurrence identified in soil and groundwater is primarily residual in nature and does not indicate the presence of free product solvent (DNAPL).

TCE is the only solvent detected in soil at a concentration near or above its residual saturation limit indicating the possible presence of DNAPL. Only one of the 176 soil samples collected from the Site contained a TCE concentration greater than the 1,300 mg/kg saturation limit. The sample, KB-33(4-6) was collected from near-surface fill materials in the western source area. A soil sample (KB-40[6-8]) collected from the subjacent native silty clay contained a TCE concentration one order of magnitude less than its saturation limit. TCE occurrence in the soil in the area of KB-33 is illustrated on Figure 14a.

TCE was detected only once in one groundwater sample at a concentration indicating the possible presence of DNAPL. Groundwater data do not indicate the possible presence of any other solvent. A concentration equal to one percent of the solvent solubility is an industry standard indicator of possible DNAPL presence. In February 1997, a groundwater sample collected from monitoring well MW-132 located in the western source area contained a TCE concentration of 15,000 ug/L. One percent of the TCE solubility is 11,000 ug/L at standard

temperature and pressure conditions. Monitoring has been conducted over a ten-year period in the western source area. TCE occurrence in groundwater is illustrated on Figure 15a.

Well MW-132 is screened in the upper half of the near-surface water-bearing sand unit at approximately 10-20 feet bgs. Adjacent well MW-147 is screened in the lower half of the same sand unit at approximately 20-30 feet bgs. Groundwater samples collected from well MW-147 seldom contained detectable TCE concentrations (Table 9a and Figure 15a). When detected, TCE was present at a concentration several orders of magnitude less than one percent of the solubility. The generalized hydrogeology of this area is illustrated on Figure 11a.

Monitoring wells MW-148, MW-153, and MW-161 are located downgradient of MW-132 (Figures 12a through 12i). Well MW-148 fully penetrates the near-surface water-bearing sand unit; well MW-153 nearly fully penetrates the unit, and well MW-161 penetrates over one-half of the unit (Figure 11a). A silty clay is present subjacent to the sand unit over the entire western source area. Maximum dissolved TCE concentrations detected in these downgradient wells are orders of magnitude less than one percent of solubility. Organic vapor readings taken from soil samples collected during the installation of wells MW-147, MW-148, MW-153 (MW-202), and MW-161 all indicate maximum VOC concentrations near the water table surface in the saturated sand unit. The readings decline with depth to their lowest levels at the base of the sand unit.

Based on the soil and groundwater analytical data and field measurements of organic vapors in the soil, a conceptual model of DNAPL occurrence at the Site can be developed. In general, DNAPL presence is minimal. One localized area of DNAPL occurrence was discovered in the western source area. Apparent TCE solvent occurs in near-surface fill materials at a depth of approximately four to six feet bgs and is absent in the subjacent native soils. The depth to groundwater in the area of detection is approximately 12 feet bgs. The lateral extent of the "hot spot" is less than 30 feet in diameter. Data indicate that migration of DNAPL from the fill materials to the underlying native soils has not occurred.

4.4.2 PAHs

PAHs have not been detected in on-Site surface or subsurface soil at concentrations above screening levels (Tables 6b and 7b; Figures 13b and 14c). PAHs have been randomly detected at concentrations nominally above screening levels in both on-Site and off-Site groundwater (Tables 8b, 9b, 10b; Figures 15d and 16c). No PAH groundwater plume has been identified.

4.4.3 Metals

Cadmium has not been detected at concentrations above its screening level in on-Site surface soil but has been detected at concentrations above this level in on-Site subsurface soil (Tables 6c and 7c and Figures 13c and 14d). Total cadmium has not been detected in either on-Site or off-Site groundwater at concentrations exceeding its screening level (Tables 8c, 9c, and 10c). It is generally contained in buried waste material rather than Site soil and groundwater. No total cadmium groundwater plume has been identified.

Total chromium has not been detected in on-Site surface or subsurface soil at concentrations above its screening level (Tables 6c and 7c; Figure 13c and 14d). Total chromium has not been detected at concentrations above its screening level in on-Site groundwater and has not been detected at concentrations above its screening level in off-Site groundwater (Tables 8c, 9c, and 10c). It is generally contained in buried waste material rather than Site soil and groundwater. No total chromium groundwater plume has been identified.

Lead has been detected in on-Site surface and subsurface soils at concentrations exceeding its screening level (Tables 6c and 7c; Figures 13c and 14d). Lead is also primarily contained in the buried waste, however, it has been detected at concentrations that have resulted in impact to native Site soils. Total lead has been detected at concentrations nominally above its screening level in both on-Site and off-Site groundwater (Tables 8c, 9c, 10c; Figures 15e and 16d). The lead occurrence in groundwater is random with no apparent connection to the western source area. No total lead groundwater plume has been identified. It has been observed that the sampling technique (i.e., standard purge and bail versus low-flow sampling) greatly affects total lead concentrations. Groundwater samples were collected using a low-flow purging technique during the July 2002, groundwater sampling event. KERAMIDA staff observed a reduction of sediment within the sample. This technique is believed to provide a more representative sample of the actual groundwater to evaluate for the metals COPCs. Therefore, the lead concentrations are not a concern for the Site.

4.4.4 Surface Soil COPCs

COPC concentrations in on-Site surface soil were compared to non-residential screening levels because current and future land use indicates only non-residential activities will occur at the Site. None of the detected concentrations exceeded the surface soil screening levels. No surface soil

samples have been collected from off-Site areas. Therefore, no COPCs were obtained for this medium.

4.4.5 Subsurface Soil COPCs

COPC concentrations in on-Site subsurface soil were compared to non-residential screening levels because current and future land use indicates only non-residential activities will occur at the Site. The results indicate that the following COPCs are present in on-Site subsurface soil at concentrations exceeding their screening levels:

- Lead
- Cadmium
- cis-1,2-DCE
- TCE

Soils containing these COPCs above screening levels were all located within the western source area.

COPC concentrations in off-Site subsurface soil were compared to residential screening levels because current off-Site residential land use is expected to continue near the Site. No COPCs were detected in off-Site subsurface soil above the residential screening levels.

4.4.6 Groundwater COPCs

Detected concentrations in on-Site groundwater were compared to non-residential screening levels because current and future land use indicates only non-residential activities will occur at the Site. The results indicate that the following COPCs are present in on-Site groundwater at concentrations exceeding their screening levels:

- cis-1,2-DCE
- TCE
- VC

COPC concentrations in off-Site groundwater were compared to residential screening levels because current off-Site residential land use is expected to continue near the Site. The results indicate that the following COPCs are present in off-Site groundwater at concentrations exceeding their screening levels:

- 1,1-DCE
- cis-1,2-DCE
- TCE
- VC

4.4.7 Surface Water COPCs

COPC concentrations in surface water were compared to residential groundwater screening levels because current off-Site residential land use is expected to continue near the Site. No COPCs were obtained for surface water.

4.4.8 Sediment COPCs

COPC concentrations in sediment were compared to residential surface soil screening levels because current off-Site residential land use is expected to continue near the Site. No COPCs were obtained for sediment.

4.4.9 COPC Characteristics

A discussion of chemical-specific toxicological, physical, and chemical characteristics for Site COPCs is presented in the Human Health Risk Assessment (HHRA) included in Attachment 15 to the RWP.

4.5 EXTENT OF CONTAMINATION

The following sections discuss the horizontal and vertical extent of contamination at the Site.

4.5.1 Eastern Source Area

VOCs were detected in the soils at concentrations below their screening levels in this area. Figures 13a through 13c and 14a through 14d present surface and subsurface soil analytical results for this area. As seen in these figures, VOCs were detected in the soil over an area extending approximately 140 feet south of the building (MW-146) to approximately 240 feet east of the source area (MW-156) located off-Site on the east side of Olin Avenue. It should be noted that subsurface soil samples collected from MW-146, SB-10-5, MW-156, and MW-200, were collected at intervals within the historic range of the groundwater table. Therefore, the VOC results in these samples may be more reflective of groundwater conditions rather than soil conditions. When not considering these samples, the area of VOC occurrence in soil decreases

to approximately 80 feet south of the building (GP-5) to approximately 60 feet east of the source area (SB10-4).

VOCs were detected in this area groundwater at concentrations above their screening levels both on-Site and off-Site to the east in the neighboring residential area. Monitoring wells associated with the eastern source area include MW10-1, MW-135, MW-146, MW-150, MW-151, MW-152, MW-156, MW-157, MW-159, MW-162, MW-163, MW-164, MW-200, MW-201, and MW-301. Figures 15a to 15c present historical dissolved TCE, cis-1,2-DCE, and VC data in the shallow zone of the upper sand unit, respectively. As seen in these figures, groundwater plumes have been identified for cis-1,2-DCE and TCE. VC is absent in the eastern source area. As expected, the TCE plume is greater in magnitude and extent than its daughter product cis-1,2-DCE. Dissolved TCE concentrations exceeding residential cleanup goals extend approximately 350 feet east of the Site to Lutt Avenue and about 150 feet south of the Site near the end of Olin Avenue. The cis-1,2-DCE groundwater plume is smaller in magnitude and extent. Cis-1,2-DCE concentrations exceeding residential screening levels extend approximately 200 feet east and approximately 130 south of the Site.

An anomalous area of dissolved TCE occurrence was noted at the location of MW-163 and KB-1 (Figure 15a). Lower TCE concentrations were noted at locations surrounding MW-163 and KB-1, including to the north at MW-162, to the west at KB-12 through 15 and MW-150, to the south at MW-156, and to the east at KB-11. Based on the observed groundwater flow patterns and surrounding groundwater data, the cause of the elevated TCE at this location is uncertain and seemingly not associated with the Site.

Vertically, the dissolved VOCs are contained within the shallow zone of the upper sand unit. TCE has not been detected in the deep zone of the upper sand unit anywhere at the Site. Cis-1,2-DCE has not been detected in the deep zone of the upper sand unit in the eastern source area. Cis-1,2-DCE occurrence in the deep zone is depicted on Figure 16a. As previously mentioned, VC is absent in the eastern source area.

Historical groundwater data for push-probes, shallow monitoring wells, and deep monitoring wells are presented in Tables 8a through 8c, 9a through 9c, and 10a through 10c. Historical TCE, cis-1,2-DCE, and VC data for shallow groundwater are depicted on Figures 15a through 15c. Groundwater data in the eastern source area are available for some wells from as early as

1992. As can be seen from the historical and current data, there is no apparent upward trend in TCE concentrations indicating that the plume is stable or decreasing.

4.5.2 Western Source Area

VOCs were detected in subsurface soils of the western source area at concentrations above screening levels (Figure 14a). VOCs were generally present in trace concentrations or absent in surface soils of this area. It should be noted that VOCs are not present in soil or groundwater beneath the building at concentrations above screening levels (Figures 14a and 15a through 15c).

VOCs

VOCs were detected in groundwater both on-Site and off-Site to the south across Little Eagle Creek at concentrations exceeding screening levels. As discussed in a later section, off-Site VOC occurrence is, at least in part, attributable to off-Site sources. As with the eastern source area, the primary VOC of concern include TCE, cis-1,2-DCE, and VC. On-Site, the VOC occurrence is limited to the shallow zone of upper sand unit. Off-Site to the south, the VOC occurrence appears to be greatest within the deep zone of the upper sand unit. VOCs have not been detected in the lower silty clay unit at concentrations above screening levels.

TCE was detected in on-Site groundwater at concentrations above screening levels only in the shallow zone of the upper sand unit (Figure 15a). The TCE daughter products cis-1,2-DCE and VC were the only VOCs detected in the upper sand unit off-Site to the south. Cis-1,2-DCE was detected off-Site in both the shallow and deep zones of the upper sand unit at concentrations above screening levels (Figures 15b and 16a). In the shallow zone, cis-1,2-DCE was intermittently present and no identifiable dissolved plume is apparent. The greatest off-Site concentrations of cis-1,2-DCE occur in the central portion of the Michigan Meadows apartment property (MW-166). Much lower concentrations were detected in MW-165 located on the Michigan Meadows apartment property just south of Little Eagle Creek and upgradient of MW-166 (Figure 15a). Cis-1,2-DCE is less extensive in the deep zone as shown in Figure 16a. VC occurrence in the shallow zone is similar to that of the cis-1,2-DCE (Figure 15c). The VC occurrence is more extensive in the deep zone than in the shallow zone (Figure 16b).

Historical groundwater data for push-probe soil borings, shallow monitoring wells, and deep monitoring wells are presented in Tables 8a through 8c, 9a through 9c, and 10a through 10c. Historical TCE, cis-1,2-DCE, and VC data from the shallow zone are also depicted in Figures

15a through 15c, respectively. On-Site groundwater data in the western source area are available in some wells as early as 1992. As can be seen in the time series data, there is no apparent upward trend in TCE concentrations. Maximum detected TCE concentrations were observed during historical sampling events, indicating that the plume is stable or decreasing. More limited historical groundwater data are available for off-Site areas to the south.

PAHs

PAHs occurrence was originally discovered in the western source area in association with the buried waste material. Since PAHs were added to the list of COPCs, subsequent soil sampling was performed across the Site to investigate PAH occurrence and provide data for closure. Although associated with buried waste material, surface and subsurface soil data show that PAHs are generally not detected in the western area. PAHs were detected at concentrations below screening levels in surface soils in the eastern portion of the Site (Figure 13b). It is thought that the PAH occurrence is due to historic general land use. As with VOCs, the PAH occurrence in soil was mitigated during the buried waste removal action. One isolated PAH occurrence was observed in the buried waste beneath the building at a concentration below non-residential and residential screening levels (Figure 14c).

In groundwater, PAHs were randomly detected at concentrations below screening levels. In the shallow zone, PAHs in off-Site wells MW-162 (located east of the Site on Olin Avenue) and MW-169 (located south of the Site on Cossell Road) were detected at concentrations above residential screening levels, but below non-residential screening levels (Figure 15d). Based on the locations of the PAH detections, they do not appear to be related to the Site. Similarly, in the deep zone, PAHs have been detected at concentrations above residential screening levels, but below non-residential screening levels in on-Site well MW-200 and off-Site well MW-167D located along Michigan Street to the south (Figure 16c). As with the shallow zone, the PAH occurrence in the lower zone is random and limited in extent.

Metals

Metals occurrence in Site soils is related to the buried waste in the western source area (Figures 6c and 7c). In this area, only lead was detected in surface soil at concentrations above screening levels. Cadmium, and lead were detected in subsurface soils at concentrations above screening levels in this area. With the exception of the excavation bottom sample (A1) and the buried waste remaining beneath the building, the buried waste removal action conducted in the western

source area has mitigated metals occurrence in soil. Locations where surface soil containing lead concentrations above screening levels were removed during remedial activities are indicated on Figure 20 and 23.

In groundwater, only total chromium and total lead have been detected. Total chromium has not been detected in either on-Site or off-Site groundwater at concentrations above screening levels. Total lead has been detected at concentrations nominally above screening levels. Its occurrence is erratic and does not indicate the presence of a definable groundwater plume. The total lead concentrations from early sampling events appear typical of groundwater samples where turbidity is a concern. This is supported by a comparison of the historical total lead concentrations. Initial sampling for total metals was performed using standard purge and sample techniques with bailers. This technique tends to result in more turbid samples. As required by VRP guidance, none of the groundwater samples collected at the Site have been filtered. The most recent sampling event was performed using low-flow sampling methods. As can be seen in Tables 9c and 10c, total lead levels significantly decreased using low-flow sampling. Based on the most recent data, total lead concentrations slightly exceed screening levels in only five wells, four of which are located off-Site to the south. Only on-Site well MW-200 (with a lead concentration of 36.6 ug/l), which is not located in the western source area, contained total lead above its screening level of 15 ug/L. Based on the most recent sampling data, total metals in groundwater are not a concern at the Site.

4.6 ECOLOGICAL ASSESSMENT

A screening-level ecological risk assessment (SLERA) was completed for the Site and is presented in Attachment 16. A brief discussion of the SLERA and its conclusions is presented below.

4.6.1 Environmental Setting

Review of the National Wetlands Inventory (NWI) Map for the Site and surrounding area shows the nearest potential wetland is approximately one mile south-southwest of the Site along the north side of Eagle Creek. Review of the Flood Insurance Rate Map (FIRM) for the City of Indianapolis, Indiana shows the Site and immediately surrounding properties are within the 100-year floodplain.

The Indiana Department of Natural Resources (IDNR) and the USFWS provided information on rare, threatened, or endangered species or habitats at or near the Site. The IDNR reported no listings for such species in the Site area. USFWS reported that the Site is within the range of the Federally endangered Indiana bat (*Myotis sodalis*) and the Federally threatened bald eagle (*Haliaeetus leucocephalus*). However, no suitable habitat exists at the Site for either of these species.

Based on this information, no ecological habitats were identified on-Site. Two potential ecological habitats identified near the Site are (1) Little Eagle Creek adjacent to the southern property boundary, and (2) Eagle Creek located approximately 0.75 miles south of the Site.

4.6.2 Data Evaluation and Identification of COPCs

FDGTI collected surface water samples at three locations (Figure 8) in Little Eagle Creek in October 1996 and February 1997 and analyzed them for VOCs. The October 1996 sampling event represented low-flow conditions and the February 1997 sampling event represented high-flow conditions. The only VOC detected was cis-1,2-DCE during the low-flow sampling event (Table 11a). The maximum detected concentration was 17 ug/L. Further evaluation and use of the FDGTI data was not possible because complete information on the data generation was not available to KERAMIDA for validation.

In March of 2000, KERAMIDA collected samples of surface water and sediment from five locations in Little Eagle Creek (Figure 8). No VOCs were detected in the surface water or sediment samples (Tables 11a and 11b and Figure 17). The detection limits for the surface water and sediment samples were evaluated by comparison with ecological toxicity-based benchmarks (screening levels) obtained from USEPA and other federal and state sources. Tables 11a and 11b list the surface water and sediment data, respectively, along with their ecological screening levels.

In surface water, the detection limits for acrolein, acrylonitrile, bromodichloromethane, dichlorodifluoromethane, trans-1,4-dichloro-2-butene, 1,1-dichloroethane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, ethyl methacrylate, trichlorofluoromethane, and vinyl chloride were elevated above their respective screening levels. Vinyl chloride and 1,1-dichloroethane are the only two of these compounds that may be Site-related and have the potential to be present at concentrations below their reported detection limits.

In sediment, the detection limits for acrolein, acrylonitrile, 1,2-dibromo-3-chloropropane, hexachlorobutadiene, and vinyl chloride were elevated above their respective screening levels. Vinyl chloride is the only one of these compounds that is Site-related and has the potential to be present at concentrations below the reported detection limit.

4.6.3 Conclusions

Based on this information, no COPCs were identified for Little Eagle Creek or Eagle Creek. To address those undetected analytes which had detection limits that exceeded their respective screening levels, additional surface water and sediment sampling and analysis are planned.

5.0 RISK ASSESSMENT

A Site-specific Human Health Risk Assessment (HHRA) and Screening Level Ecological Risk Assessment (SLERA) were completed to evaluate potential risks to human health and the environment. The objectives of the HHRA and SLERA were to (1) evaluate potential adverse human health effects and ecological effects from Site-related contaminants, and (2) develop Site-specific closure levels for COPCs that present excess risks and hazards. The results of the HHRA and SLERA were then used to develop remediation goals and procedures for the Site. The HHRA and SLERA are included as Attachments 15 and 16, respectively. A summary of the HHRA and SLERA results are presented below.

Results of the HHRA indicate that the levels of COPCs in on-Site surface soil, subsurface soil, and groundwater are not expected to present any excess risks to on-Site industrial workers or construction/utility workers through incidental soil ingestion or inhalation of vapors or particulates. There is no on-Site exposure pathway to groundwater for drinking purposes because no wells are located on-Site, potable water is provided by municipal water supply, and the Site is located in a No Well Zone which restricts the installation of water supply wells.

Potential off-Site commercial/industrial workers and residential receptors may be exposed to unacceptable risks and hazards if current groundwater COPC concentrations remain the same and potable use of groundwater occurs in downgradient areas.

No analytes were detected in surface water or sediment samples of Little Eagle Creek. Therefore, no risks or hazards are expected for recreational users or ecological receptors in this habitat. In addition, groundwater fate and transport modeling shows that no Site-related COPCs will reach Eagle Creek. The issue of PAHs, metals, and non-detectable VOCs will be addressed by confirmation sampling to ensure that if any of these chemicals are detected in Little Eagle Creek, they indeed are below human and ecological screening levels.

6.0 CLEANUP CRITERIA SELECTION

Based on the results of the HHRA, current COPC concentrations in on-Site subsurface soil and groundwater do not require remediation to prevent excess risks to receptors. However, as a conservative measure, Genuine Parts chose to remediate those media to the VRP Tier II Default Non-Residential Cleanup Goals. The area to be included in the VRP Covenant-Not-To-Sue is shown on Figure 2. The list of COPCs is presented in Attachment 14. The selected cleanup criteria for the media-specific COPCs are discussed in the following sections.

6.1 SURFACE SOIL

Based on the results of the surface soil screening, remediation will not be required.

6.2 SUBSURFACE SOIL

Based on the results of the human health subsurface soil screening, the following areas and COC required remediation:

- The western source area associated with former parts degreasing operations and waste burial activities located in the western portion of the Site.
- COC to be addressed include TCE, cis-1,2-DCE, 1,2-Trimethylbenzene, lead, and cadmium.

The proposed cleanup criteria for these COC in these areas are the Indiana VRP Tier II Non-Residential Cleanup Goals for subsurface soil.

As previously stated in Section 4.3.2, the identified buried waste was removed and properly disposed between April and July of 2001. Confirmation soil sampling conducted during the buried waste removal action verified that all source material in the identified burial areas was removed. Buried debris and VOC and lead impacted soils in the lead soil "hot spot" were

excavated and properly disposed of. Confirmation soil sampling verified that lead impacted soils in the lead soil "hot spot" were remediated to concentrations below its respective Tier II Non-Residential and Residential Cleanup Goals. SVE is currently being performed in the VOC soil "hot spot" to further reduce residual VOC concentrations.

6.3 GROUNDWATER

The following on-Site areas and COPCs will be remediated:

- The eastern source area thought to be associated with apparent former solvent operations located near the southeastern corner of the building.
- The western source area associated with former parts degreasing operations and waste burial activities located in the western portion of the Site.
- COPCs to be addressed include cis-1,2-DCE, TCE, and VC.

The proposed cleanup criteria for these COPCs in these areas are the VRP Tier II Non-Residential Cleanup Goals, which are listed in Tables 9a through 9c.

Based on the results of the HHRA, the following off-Site groundwater COPCs will require remediation:

- 1,1-DCE
- cis-1,2-DCE
- TCE
- VC

However, the groundwater COPCs are likely contributed by off-Site sources as well as the Site and, therefore, the risks from off-Site groundwater COPCs are only partially attributable to on-Site source areas. Identification and delineation of off-Site source areas would be required to evaluate the relative contributions of on- and off-Site sources to the groundwater COPC concentrations and resulting risks. Should COPC concentrations and groundwater use remain the same, the VRP Tier II Residential and Non-Residential Cleanup Goals would be appropriate for residents and commercial/industrial exposure, respectively. If exposure to groundwater COPCs is prevented, alternative cleanup goals should be identified for groundwater. If

groundwater COPC concentrations decline, then potential risks and hazards should be re-evaluated to determine if they have decreased to below the target levels.

Off-Site VOC occurrence in groundwater will be addressed through an exposure prevention remedy, which is discussed in detail in Section 8.2.6.

6.4 SURFACE WATER

Based on the results of the surface water screening, remediation will not be required for surface water.

6.5 SEDIMENT

Based on the results of the sediment screening, remediation will not be required for sediment.

7.0 STATEMENT OF WORK

7.1 OBJECTIVES OF REMEDIAL ACTION

The objectives of the remedial action are to remove known buried wastes such as automotive parts and drums of discarded floor sweeps-/automotive scraps and to address residual VOC, PAH, and targeted metals occurrence in soil and groundwater where present at concentrations at or above the identified cleanup goals.

Previous investigations identified two separate source areas of Site COPCs. These source areas are located in the western and southeastern portions of the Site. VOC groundwater contamination from these two source areas extends southward off the property in the direction of groundwater flow. Apparent off-Site sources of VOCs in groundwater have also been identified.

A full-scale air sparge/soil vapor extraction (AS/SVE) System was constructed to aggressively reduce the two separate VOC groundwater plumes on Site and to mitigate the off-Site migration. The AS/SVE System consists of air sparging and vapor extraction wells. Additionally, phytoremediation was incorporated into the system and is comprised of two rows of hybrid poplar trees lining the entire southern property boundary to further mitigate off-Site COPC migration.

Off-Site VOC occurrence in groundwater will be addressed through an exposure prevention remedy, which is discussed in Section 8.2.6.

7.2 SUMMARY

A. Major tasks to be completed or that have already been completed to address soil contamination are as follows:

- Removal of buried drums containing scrap automotive parts and other waste materials located in the western source area.
- Removal of additional VOC, PAH, or metals-impacted soil encountered during the implementation of the above tasks. This may include soils excavated during the above tasks and/or soils determined to contain VOCs, PAHs, and metals, above the selected remediation goals based on confirmation sampling.
- In-place remediation of the TCE "hot spot" by SVE. Following the reduction of TCE concentrations in soil, the identified lead-impacted fill materials in the "hot spot." A majority of the "hot spot" has been removed and properly disposed of.

B. Major tasks to be completed or that have been implemented to address groundwater contamination are as follows:

- Installation and operation of an AS/SVE system in the eastern and western source areas.
- Planting of hybrid poplar trees along the southern (downgradient) property boundary.
- Plume stability monitoring to confirm that the identified dissolved VOC plumes are not expanding.

7.3 SITE SAFETY PLAN

A detailed Site health and safety plan has been prepared for the remedial activities. The plan conforms to OSHA standards as outlined in 29 CFR 1910.120. A copy of the plan is provided as Attachment 8. All personnel and visitors involved in remediation activities at the Site, will be briefed on the plan's contents, given the opportunity to read the plan and required to sign the plan and date their signature.

7.4 QUALITY ASSURANCE PROJECT PLAN

KERAMIDA has prepared a detailed quality assurance project plan for the remediation effort. The plan meets all of the criteria described in the VRP Resource Guide (IDEM, 1996). A copy of the plan is provided as Attachment 7.

8.0 REMEDIATION PLAN

8.1 BURIED WASTE REMOVAL ACTION

Historic buried waste was discovered at the Site in May 2000 while installing groundwater remediation system piping. During that time, stained soils, decayed drums, and miscellaneous small metallic debris (automotive parts) were encountered during trenching activities in the southwest corner of the Site in the vicinity of remediation system vent well SVE-8 (Figure 21). Contaminated soil with varying amounts of debris was also encountered in the vicinity of SVE-3 and in several soil/vent well boreholes.

The discovery of the buried waste prompted an investigation of the entire property (excluding areas under roof) to locate other potential buried waste areas. The investigation included a geophysical survey and exploratory trenching (Figure 19). In response to the findings, a removal action was designed and implemented to mitigate the buried waste concern. The remedial action consisted of waste sampling, analysis, and determination; waste excavation, transport, and disposal; confirmatory soil sampling; and Site restoration (Figure 20). The waste removal action spanned from discovery in May 2000 to completion of the action in July 2001.

During removal, the debris was noted to extend beneath the western portion of the facility building. A Geoprobe® survey was conducted to characterize the fill material and delineate its extent. The remaining buried waste extends approximately 100 feet to the east beneath the building and is limited to the north and south by the footprint of the building. The approximate extent of waste materials beneath the building is illustrated on Figure 20. Based on the Geoprobe® survey, the buried waste typically begins one to feet bgs and terminates at depths ranging from 3 to 5 feet bgs. A thin layer of parts was noted between 13 and 13.5 feet bgs in KB-i4. In general, the buried waste beneath the building consists of a similar mixture of small metal parts and other debris encountered. The only exception is a one-foot thick layer of

powdery material observed in KB-i6, which contained no parts or other debris in the entire boring. Given an average thickness of approximately three feet and an area of approximately 7,500 square feet, the total volume of material remaining beneath the building may approach approximately 830 cubic yards. Since removal of the buried waste beneath the building is infeasible, a deed restriction will be used to prevent exposure to the remaining waste beneath the building.

The Phase II Report provides an in depth discussion and extensive documentation on the buried waste removal action summary above. As part of this RWP, the following information regarding the buried waste removal action is presented:

- Surface and subsurface soil confirmation sampling results are presented in Tables 12a through 12c and 13a through 13c, respectively.
- Surface and subsurface soil confirmation sample locations and analytical results are depicted on Figures 13a through 13c and 14a through 14d, respectively.
- Geophysical anomalies and test trench locations are depicted on Figure 19.
- Removal action excavation areas are depicted on Figure 20.

8.2 GROUNDWATER REMEDIATION PLAN

8.2.1 Development and Screening of Remedial Alternatives for Source Areas

The initial development and screening of alternatives is based on information provided in the September 19, 1997 "Draft Remedial Investigation Report" prepared by FDGTI for General Motors found in Attachment 5 of KERAMIDA's "Phase II Investigation Report" dated March 29, 2002. *"The objective of the development and screening of technologies is to identify, screen, and develop alternatives for removal, containment, treatment and/or other remediation of impacted areas at the Site."*

The Investigation identified two separate VOC groundwater plumes associated with two separate source areas. These source areas are located in the western and southeastern portions of the Site. VOC groundwater contamination from these two source areas extends southward off the property in the direction of groundwater flow. Alternatives for the remediation of these two source areas of groundwater contamination were screened by using matrices for evaluating remediation strategies as documented in the June 3, 1997 "Draft Feasibility Report" prepared by

FDGTI for General Motors found in Attachment 5 of KERAMIDA's "Phase II Investigation Report" dated March 29, 2002. *"These matrices were based upon applicability (technical feasibility), protection of public health and the environment, cost and treatment time, and administrative considerations."*

Site-specific information, such as chemical type and characteristics; Site medium; chemical concentrations distribution throughout medium; etc. is needed to screen remediation technologies and identify potential corrective measure alternatives. Advantages such as mobility reduction, destruction, volume reduction, etc. and disadvantage such as emerging or inappropriate technology, non-permittable, etc. are used to evaluate the applicability of a technology to remediate impacted areas at any specific Site. Exposure to Site workers, visitors, and surrounding population along with potential community impacts (real or perceived) is evaluated. And capital costs, operating costs, treatment time and administrative considerations are also evaluated. Each of the areas evaluated is rated and given a numerical value to the technologies relative applicability to the specific Site.

8.2.2 Remedial Technologies Screened for Source Areas

Various active remedial technologies in combination with each other were considered for source area treatment of groundwater including:

- Soil Vapor Extraction combined with Air Sparging,
- Groundwater Pump & Treat, and
- Ozone Injection

The two most viable options for groundwater remediation in the "Draft Feasibility Report" include soil vapor extraction (SVE) combined with air sparging (AS) and groundwater pump & treat. In addition, reductive dechlorination was considered for mitigation of the anomalous TCE occurrence east of Olin Avenue.

8.2.2.1 Soil Vapor Extraction

Soil vapor extraction is a process of removing volatile contaminants from the subsurface by using a vacuum to create airflow through the subsurface soil. The continual flow of air results in volatilization of contaminants either from adsorbed phase or free phase and ultimate removal by the vacuum system. SVE also is used in conjunction with air sparging to remove vapors from

the subsurface after they are volatilized from the groundwater by the sparging system. The effectiveness of vapor extraction is limited by the volatility of the contaminants and the air permeability of the soil. Clay-rich soils typically have low air permeability and are not good candidates for SVE unless it is enhanced by soil heating. Sandy soils such as those present beneath the fill material and surficial silty clay at the Site are well suited for SVE. However, the treatment would be limited to the unsaturated zone.

This technology has been widely used and is well accepted for unsaturated zone treatment. However, it may require treatment of extracted vapors to eliminate issues of discharge of potential pollutants to the atmosphere. This alternative would require pilot testing to evaluate its feasibility at the Site and to obtain information for a full-scale design.

8.2.2.2 Air Sparging

Air sparging is a widely used and relatively well-accepted remedial technology consisting of the injection of air below the groundwater table to volatilize contaminants. The technology is applicable to dissolved contaminants as well as free phase. The process involves the creation of air bubbles moving through the soil in the saturated zone. As the bubbles move upward, contaminants are volatilized into the air bubble and moved into the unsaturated zone. The contaminants can then be removed by soil vapor extraction or in some cases allowed to naturally migrate to the surface. In cases where contaminants can degrade aerobically, AS can enhance natural attenuation by providing oxygen (biosparging). AS systems can also be used to deliver nutrients to the groundwater. AS systems are suitable for relatively homogeneous medium to high permeability soil. Sandy soils such as those present beneath the fill material at the Site are well suited for AS.

This technology is well suited for the saturated zone at the subject Site and is a proven, widely-accepted technology. This alternative would require pilot testing to evaluate its feasibility at the Site and to obtain information for a full-scale design.

8.2.2.3 Groundwater Pump and Treat

Groundwater pump and treat consists of physical removal of contaminated water from the ground, treatment of the water to remove the contaminants (by air stripping, carbon adsorption, or other physical/chemical methods) and discharge of the treated water to a sewer or stream. This can be an effective method for controlling plume migration, especially in permeable soils.

However, the removal rate of contaminants is limited by the process of adsorption and desorption of contaminants to/from soil particles and diffusion into the groundwater. Thus, the efficiency in contaminant mass removal is generally poor, resulting in extended remediation times (tens of years). Also, these systems require considerable maintenance and generate waste streams.

Although this technology is widely used, it is more applicable as a dissolved plume control technology than a remediation technology. Proper design requires pilot testing to determine aquifer characteristics. Due to the extensive time frame to achieve remediation goals and the associated O&M costs, including permit issues for discharge of the treated groundwater, this technology is not well suited for the Site.

8.2.3 Treatability Investigation for Source Areas

Based on the screening of technologies and the potential applicability of SVE/AS, FDGTI conducted pilot scale tests in the western and southeastern source areas of the Site on February 24, 1997 to:

- Evaluate the technical feasibility of using the SVE/AS technology at the Site.
- Determine the radius of influence for single-well SVE test.
- Determine the radius of influence for single-well AS test.

8.2.3.1 Soil Vapor Extraction

The SVE only pilot scale test in the southeastern area of the Site determined that a vacuum radius of influence (ROI) of approximately 28 feet can be achieved by the application of a vacuum of 14 inches of water. This equates to a design flow rate of 25 standard cubic feet per minute (scfm) per foot of well screen at 14 inches of water. Short-term SVE tests were also conducted in western area of the Site. A vacuum of 45 inches of water at a flow rate of 25 scfm per foot of well screen was observed. The results from the western area of the Site suggested that adequate airflow rates can be achieved except in the extreme northwest portion due to greater amounts of clay and silt in the vadose zone. Descriptions of the pilot test set-up, methods used and monitoring parameters can be found in the "Draft Feasibility Study Report".

8.2.3.2 Air Sparging

The AS pilot scale test was conducted in the southeastern area of the Site. An ROI of 20 feet was possible at an airflow rate of 9.5 scfm at an injection rate of 4.5 pounds per square inch (psi). Descriptions of the pilot test set-up, methods used and monitoring parameters can be found in the "Draft Feasibility Study Report".

8.2.4 Selected Remedial Technology for Source Areas

Based on the findings of the technology screening, the technologies appear to cost approximately the same to design and install. However, permitting, operation, and treatment costs would be higher for the groundwater pump & treat approach. The estimated cleanup time of the groundwater pump & treat system is approximately 10 years and will require water management. The expected cleanup time for the SVE/AS system is 3 to 5 years and will require minimal water management comparatively. Results of the SVE/AS pilot-scale test indicate this is a feasible technology for the Site.

Based upon the evaluation of remedial technologies, SVE/AS was selected as the most appropriate technology for source remediation based on expected operation and maintenance costs and expected duration of cleanup. In addition, reductive dechlorination was selected as the most appropriate technology for mitigation of the anomalous TCE occurrence east of Olin Avenue.

8.2.5 Remediation System for Source Areas

The Investigations identified two separate VOC groundwater plumes associated with two separate source areas. These source areas are located in the western and eastern portions of the Site. VOC groundwater contamination from these two source areas extends southward off the property in the direction of groundwater flow. Various remedial technologies were screened and SVE/AS proved to be the most applicable technology and based on expected operation and maintenance costs and expected duration of cleanup is the selected remedial technology.

Based upon the results the pilot-scale testing, a full-scale SVE/AS design was completed. In addition to the SVE/AS system, a phytoremediation system consisting of hybrid poplar trees was included into the design as a buffer line along the entire southern property line to intercept groundwater as it flows off-Site. Phytoremediation is the use of various plants to remediate environmental media. Phytoremediation has been shown to be effective in remediation of soil,

sediment, groundwater, and surface water, and on organic and inorganic contaminants. Phytoremediation applications cleanup contaminated media by degrading, extracting, containing, and/or immobilizing the contaminants.

The full-scale system design described above was then constructed. The SVE/AS portion of the remediation system consists of a total of 44 air sparging and 27 vapor extraction wells, while the Phytoremediation portion of the remediation system is comprised of two rows of hybrid poplar trees lining the entire southern property boundary. A layout of the remediation system can be found on Figure 21.

8.2.5.1 Remediation System Design

The SVE/AS portion of the remediation system was separated into a two western treatment units and one southeastern treatment unit. Each treatment unit is serviced by separate equipment, with the equipment for both of the western treatment units housed in one enclosure/trailer and the equipment for eastern treatment unit housed in a separate enclosure/trailer. The northern unit of the western SVE/AS system is comprised of 7 vapor extraction wells and 10 air sparging wells and the southern unit of the western SVE/AS system is comprised of 10 vapor extraction wells and 19 air sparging wells. The southeastern treatment unit is comprised of 10 vapor extraction wells and 15 air sparging wells.

The number and layout of vapor extraction and air sparging wells for each treatment unit were determined by using the ROI results (28 feet and 20 feet, respectively) from the pilot scale testing and plotting them over the source areas. The placement of the remedial equipment and enclosures was determined by local zoning set backs, Site owner requirements and the need to locate them as close as possible to the wells. Piping from these wells to their respective remedial equipment and enclosures were then plotted making sure to minimize piping needs. Using this layout and the results of the pilot scale testing, piping and equipment sizing calculations were prepared for each treatment area. Pressure losses for various vapor extraction pipe sizes were calculated using the total expected airflow, piping friction losses and pipe lengths. The most appropriate pipe size was then chosen and the vapor extraction blowers and air compressors were sized based upon acceptable piping losses just calculated and the required vacuum or pressure determined from the pilot scale testing results. A copy of the design calculations can be found as Attachment 17.

The Phytoremediation portion of the remediation system is comprised of two staggered rows of hybrid poplar trees, on 5-foot centers, lining the entire southern property boundary. Spacing between the rows is a minimum of 8 to 10 feet. An irrigation system, designed by the selected irrigation installation company, runs the entire tree line. Copies of the phytoremediation papers used for design purposes can be found as Attachment 18.

A Construction Manual along with Construction Manual Drawings were developed based upon the proposed SVE/AS and Phytoremediation systems layout and associated design calculations. The Construction Manual details the contract terms/bidding requirements, general requirements, Site work, concrete work, mechanical work, electrical work and permitting. The Construction Manual Drawings include a Yard Plan, Trench Section Details, Well and Wellhead Details and Resurface & Equipment Pad Details. A copy of the Construction Manual and Construction Manual Drawings can be found as Attachment 19.

The design of the soil vapor extraction and air sparging wells is based upon standard practice and Site constraints. For the vapor extraction wells, the middle third of the screen for these wells must be set near the normal water table level of approximately 11-13 feet bgs (bgs). Water table elevation data can be found in Tables 3a through 3c. Therefore, the soil vapor extraction wells were screened from 5 to 15 feet bgs. For the air sparging wells, the maximum depths were based upon the depth to the clay layer underlying the saturated, sand soils in which the impacted groundwater to be remediated resides. In the northwestern portion of the western source area, the clay layer begins at approximately 30 feet bgs and in the southwestern portion of the western source area, the clay begins at approximately 20 feet bgs. The clay begins at approximately 25 feet bgs in the southeastern source area. Therefore, the air sparging wells were installed down to the clay layer depths as described above. Geologic cross-section data can be found on Figures 11a through 11g.

The Remedial Equipment and Enclosure Specifications were also developed based upon the proposed SVE/AS system layout and associated design calculations. The Remedial Equipment and Enclosure Specifications detail contract terms/bidding requirements, general requirements, Site-specific information, operational and performance standards, power and code requirements, permitting and bid checklist. The specifications also include a copy of the Construction Manual Drawings and a Remedial System Process Flow Diagram. A copy of the Remedial Equipment

and Enclosure Specifications (w/o Construction Manual Drawings) can be found as Attachment 20.

8.2.5.2 Remediation System Permitting and Disposal

There are no Federal or State permits required for the installation and implementation of the remediation system except for the State of Indiana Industrialized Building Design Release for the enclosures housing the remedial equipment. Various City of Indianapolis permits are required, including an Improvement Location, Stormwater, Right of Way Cut, and Water Connection. Permitting was delegated to the selected construction and electrical contractors and equipment vendor in accordance with the documents discussed in Section 8.2.5.1.

The only waste to be generated at the Site is condensate water from the knock-out tanks associated with each of the vapor extraction blowers. A 400-gallon poly tank is used to store these liquids and Liquid Waste Removal, Inc. of Indianapolis, Indiana has been contracted to remove and haul the condensate water for treatment/disposal at Perma-Fix located in Dayton, Ohio.

8.2.5.3 Remediation System Implementation

The remediation system was constructed in phases in accordance with the design documents and drawings discussed in Section 8.2.5.1. The installation of the soil vapor extraction wells and subsurface piping in the western source area of the Site began in May of 2000. Due to Site owner issues, construction was halted. In September of 2000 the installation of the phytoremediation portion of the remediation system and the remainder of the soil vapor extraction wells and subsurface piping was completed. The installation of the air sparging points was completed in November and December of 2000. The remedial equipment was constructed and then delivered to the Site in March of 2001. Due to the excavation work conducted in the western portion of the Site in April through May and July of 2001, as discussed in Section 7.1, final connections to the equipment including electrical and telephone were not completed until July of 2001. On July 13, 2001, the SVE/AS portion of the remediation system was initiated.

A layout of the remediation system can be found on Figure 21. Copies of the soil vapor extraction and air sparging boring and well construction logs can be found as Attachment 21. A copy of the NEPCCO – Groundwater Remediation System O&M Manual which contains

engineering drawings, component lists, start-up procedures and operation and maintenance manuals for each major piece of equipment can be found as Attachment 22.

8.2.6 Off-Site Groundwater Remediation Evaluation

Remedial alternatives were evaluated for groundwater in two off-Site areas: (1) east of the Site and Olin Avenue and (2) south of the Site across Little Eagle Creek.

8.2.6.1 South Off-Site Area

The Site is located in Marion County Health Department (MCHD) No Well Zone (NWZ) Area 2. No Well Zones indicate areas where the presence of known groundwater contamination affects the approval of water supplies by the MCHD. The MCHD is responsible for insuring that safe potable water is supplied to residential and non-residential premises. Section 10-401 of Chapter 10 (Minimum Standards for Residential Property and Housing) and Section 19-402 [sic] of Chapter 19 (Minimum Standards for Non-Residential Premises) of the Code of the Health and Hospital Corporation of Marion County provide for approval of residential and non-residential water supplies, respectively, by the Health Officer. Section 18-102 of Chapter 18 (Water Wells and Water Supply Systems) requires that if the Health Officer determines that water from a private well presents a chemical, biological, or radiological threat to those served by the supply, and if a public water main becomes available within 100 feet of any property line, that the property connect to the public water supply and the well to be abandoned.

A public water supply is available in the area of the Site and most residential and non-residential premises are connected to it, including the Michigan Meadows Apartments and nearby single-family residences. One private water well has been identified in the area and is located at 709 North Olin Avenue. The MCHD has sampled the well a number of times and has not identified contamination (Attachment 23). Section 18-201 states that permits approved by the Health Officer are required for the installation of any water well not serving a municipality or public utility. According to Pam Theivenow of the MCHD, permits are denied in a NWZ due to the presence of contaminated groundwater. Private wells located in a NWZ for industrial purposes may be approved by the Health Officer, if it can be proven that they will not create a hazard to human health (Section 18-201).

The MCHD began building a groundwater quality database and identifying NWZs in the late 1990s. A NWZ delineated by the MCHD requires approval from the City-County Council prior

to designation. Currently seven NWZs have been designated. According to Pam Theivenow, the NWZ ordinance has no expiration date associated with it. She also stated that revocation of the NWZ ordinance would require approval of the City-County Council. A copy of the NWZ maps and the pertinent chapters of the Code of the Health and Hospital Corporation of Marion County related to water supply are included in Attachment 3.

In conclusion, the NWZ ordinance provides a measure of control to prevent exposure of off-Site residents and workers to contaminated groundwater. To ensure that future exposure to the groundwater does not occur, the Applicant will establish further institutional control(s) acceptable to IDEM that will prohibit the installation of potable water supply wells.

8.2.6.2 East Off-Site Area

A small anomalous area of TCE occurrence was noted in groundwater to the east of the Site across Olin Avenue. As a protective measure, this area will be remediated by reductive dechlorination to health protective levels. The proposed remediation method for this area consists of reductive dechlorination through addition of a biodegradable carbon source to stimulate biological activity. A bench-scale "microcosm" test was completed to determine appropriate dosing concentrations. A description of the reductive dechlorination process, the well installation, microcosm study, and results is presented in the following sections.

Reductive Dechlorination Process

Reductive dechlorination is a process of enhancing the naturally occurring processes of degradation. Natural reductive dechlorination takes place in most subsurface systems due to the presence of microbes which breakdown the contaminants to harmless constituents. The goal of reductive chlorination is to enhance the natural processes by the addition of a food source for the microbes. This food source usually consists of a substance with a high carbon content such as molasses, corn syrup, etc. Reductive dechlorination is ideally suited for Sites where chlorinated solvents are present and where field indications suggest that natural attenuation is already taking place.

The benefits of this technology are the low cost compared to other remedial technologies and the lack of any extracted waste to be disposed of. The drawbacks of this technology are generally a longer time frame to achieve a "clean" Site and that over-application of the substrate can lead to

conditions becoming too reductive. In this instance, the system will stall and no enhancement of dechlorination will take place.

Field Activities

Two injection wells were installed in the proposed treatment area: one near existing well MW-163, and one in the right of way on the west side of Olin Avenue, on the centerline of Walnut Street (IW-1 and IW-2, respectively). The well locations are depicted on Figure 7. The boring logs and well construction diagrams are presented in Attachments 9 and 10. A third well (MW-173) was installed approximately 30 feet southeast of well MW-163 for monitoring the treatment. The well was constructed similar to the injection wells. The boring log and well construction diagram for this well are also provided in Attachments 9 and 10. During advancement of the borings, soil samples were collected from two foot intervals in the saturated sandy loam. These soil samples were submitted for analysis of VOCs to determine the most contaminated strata in the sandy loam. These results are presented on Table 7a. During advancement of the boring for IW-1, one split-spoon sample was collected from the saturated zone for use in the microcosm study described below. A portion of the split-spoon sample was analyzed for TCE.

Upon completion of the wells, ten gallons of groundwater were purged from IW-1 for use in the microcosm study described below. The new wells and existing wells in the area (MW-150, MW-151, MW-157, MW-164, MW-173, IW-1, IW-2, and MW-10-1) were gauged for water level, and monitored for pH, temperature, and oxidation-reduction potential (ORP). In addition, groundwater samples from each of these wells were submitted to Pace Analytical Services, Inc. of Indianapolis for analysis of TCE and total organic carbon (TOC). The results are presented in Table 9a and Figure 15a.

Microcosm Study

To confirm that the proposed remedial technology will be effective and to determine injection concentrations, a microcosm study was undertaken. The microcosm study was performed by KERAMIDA. All laboratory analyses described below were conducted by Pace Analytical Services, Inc. (PACE) of Indianapolis, Indiana.

Corn Syrup Testing

The first step of the microcosm study was to determine the TOC content of the Marsh® Lite Corn Syrup (corn syrup) to be used in the microcosm study. It was estimated on the basis of 32 grams of carbohydrates per 30 milliliters (mL) of corn syrup that the TOC concentration was 4.37×10^5 milligrams per liter (mg/L). This estimate was also based on the assumption that the carbohydrates consisted of the sugars fructose and glucose and that these sugars are 41% carbon by weight.

Three concentrations of corn syrup in distilled water were prepared and submitted to PACE for analysis of TOC. The results indicated that the actual TOC concentration of the corn syrup is 3.04×10^5 mg/L. This value was used for the corn syrup TOC concentration in all subsequent bench test calculations. The laboratory analytical packages are provided in Attachment 11.

Bench Testing

Soil from the saturated zone at boring location IW-1 (11-13' bgs) was mixed with purge water from the same monitoring well and the same depth to create four slurries of approximately 10% solids by weight. Each slurry consisted of 0.22 kilograms (kg) of Site soil and 2 kg (2 L) of Site groundwater. One slurry was used as a control sample with no corn syrup added (RV0). The others were spiked with corn syrup to create aqueous TOC concentrations of approximately 100 mg/L (RV1), 300 mg/L (RV2), and 1000 mg/L (RV3).

The four slurries were placed in 2.4 L glass reaction vessels. After the addition of the corn syrup, a sample was collected from each vessel and analyzed by PACE for TCE to establish the baseline concentration for each reaction vessel. Then each vessel's headspace was purged with nitrogen, mimicking the subsurface redox condition, and capped with a rubber stopper. A polyethylene tube was placed through each rubber stopper and attached to a Tedlar bag. This allowed for the production and collection of any off-gases without compromising the seal of the vessel. All four vessels were then incubated at the average groundwater temperature measured at the Site (approximately 14.1 °C). Samples of the liquid were collected for analysis at 7, 14, 21, and 28 days after initiation of the study. The samples were analyzed by PACE for TCE. In addition, at 28 days aqueous samples from each reaction vessel were submitted for TOC analysis and soil samples from each reaction vessel were submitted for TCE analysis. The results of the study will be used to select the most appropriate concentration of corn syrup to be injected into the subsurface.

Results and Conclusions

The analytical testing results are presented in Table 14 and Figure 22a for reference. In addition, the laboratory analytical reports are presented in Attachment 11.

The results of the baseline aqueous TCE analysis for each reaction vessel indicate that the concentration of TCE in the aqueous phase of the slurry is proportional to the concentration of corn syrup added to the reaction vessel (Figure 22b). This is likely due to the fact that the dissolved corn syrup increases the solubility of TCE in the aqueous phase. TCE is a chlorinated hydrocarbon compound that does not dissolve readily in water. The concentrations observed in the aqueous phase at IW-1 indicate that there is a reasonably high concentration of TCE adhered to the soil. The addition of corn syrup to the aqueous phase of each reaction vessel makes the aqueous phase more favorable for hydrocarbon solution. Therefore additional TCE is dissolved into the aqueous phase.

The results of the weekly aqueous TCE analyses indicate that an asymptotic decrease in TCE concentration occurred during the study. At the conclusion of the study, all four reaction vessels contained approximately 400 ug/L TCE in the aqueous phase. At this point, the system has apparently reached stasis. The most likely explanation is that the rate of microbial degradation of TCE is essentially equal to the rate of solubilization of TCE. This gives the appearance of a stalled system, as the concentration of TCE in the aqueous phase is no longer decreasing. Destruction of TCE is, in fact, continuing to take place in the aqueous phase. However, the results of that destruction can only be observed in the soil TCE concentrations. Table 14 and Figure 22c provide the TCE concentration in soil at the completion of the study. All three concentrations of added corn syrup exhibit decreases in TCE concentrations in soil below that of the control sample (RV0). Once the soil TCE is lowered significantly, the aqueous concentration of TCE will begin to decrease again.

KERAMIDA will complete a field application of corn syrup with a target TOC concentration of 100 mg/L. This concentration was chosen to optimize the degradation of TCE while not overdosing the aquifer system. Overdosing the aquifer system will lower the pH and redox potential conditions to levels detrimental to biodegradation. A system of two permanent injection wells (IW-1 and IW-2) and ten temporary injection points emplaced by a Geoprobe percussive rig will be used to deliver sufficient corn syrup to achieve the target concentration

across the entire treatment area. This application will be followed up with monthly monitoring of key wells and subsequent applications, if necessary.

8.3 VOC AND LEAD SOIL "HOT SPOT" REMEDIATION

8.3.1 Remediation Screening Alternatives

Reduction and/or removal of TCE impacted soil concentrations to below VRP Tier II Non-Residential Closure Goals and removal of Lead impacted soil concentrations to below these same Closure Goals is the objective for the "hot spot" area to reduce potential risk to human health and the environment. A preliminary evaluation of remedial alternatives for source reduction and removal resulted in selection of the following remedial technologies for further evaluation. A brief description of each technology and an evaluation of its applicability/feasibility for the subject Site are provided in the following sections.

- Soil Vapor Extraction (SVE)
- Excavation and Off-Site Disposal

8.3.1.1 Soil Vapor Extraction

SVE is a process of removing volatile contaminants from the subsurface by using a vacuum to create airflow through the subsurface soil. SVE is not an option to remediate lead impacted soils. The continual flow of air results in volatilization of contaminants either from adsorbed phase or free phase and ultimate removal by the vacuum system. The effectiveness of vapor extraction is limited by the volatility of the contaminants and the air permeability of the soil. Clay-rich soils typically have low air permeability and are not good candidates for SVE unless it is enhanced by soil heating. Sandy soils such as those present beneath and in the fill materials near the "hot spot" area are well suited for SVE. This technology has been widely used and is well accepted for unsaturated zone treatment. However, it may require treatment of extracted vapors to eliminate issues of discharge of potential pollutants to the atmosphere.

8.3.1.2 Excavation and Off-Site Disposal

Excavation and disposal of the impacted soils is a common and accepted remedial alternative. However, there are several issues and limitations to consider for this Site. These include future liability as a potentially responsible party (PRP) at the hazardous waste disposal facility, logistics and safety concerns related to excavation of hazardous materials. Based on the analytical results

from past and current investigations, the "hot spot" soil, if excavated, would be a hazardous waste.

8.3.2 Selected Remedial Technology

The use of SVE would only remediate VOC contaminants found in the "hot spot" area. Soils impacted with the detected VOC concentrations would require incineration prior to disposal, based upon current waste characterization results found in Attachment 12 and discussions with disposal facilities. The cost of disposal would be approximately \$500 per ton. However, if the VOC concentrations can be reduced to levels where the lead can be treated, the disposal cost would be reduced to approximately \$200 per ton. These figures do not include excavation and oversight costs.

Treatment of the VOC and Lead impacted "hot spot" soils would be completed by using a combination of SVE to treat the VOC-impacted soils and subsequent Excavation/Disposal of Lead impacted soils. The TCE treatment area as depicted on the Figure 23, would be remediated to concentrations below the VRP Tier II Non-Residential Closure Goals by the use of the existing SVE portion of the remediation system. Once the VOC soil concentrations were below the Closure Goals, as determined by soil sampling and analysis, the lead impacted soils would be excavated and disposed of. The lead removal area is also depicted on Figure 23.

8.3.3 Remediation System

During the period of August 25 and September 18, 2003, KERAMIDA expanded the current remediation system to treat the VOC portion of the TCE and Lead Soil "Hot Spot" area, located along the western boundary of the Site (Figure 21).

In accordance with portions of the Construction Manual (Attachment 19), KERAMIDA and its subcontractors installed four (4) sets of nested SVE wells and connected these SVE wells via subsurface piping to previously installed subsurface piping that is connected to the Southwestern Remediation System. A fifth set of SVE wells was installed in the center of the "Hot Spot"; however, on August 27, 2003, buried debris was found within the lead impacted soils portion of the "Hot Spot" area, where this set was located. The fifth set of nested wells was destroyed during removal of the buried debris. The locations of the "Hot Spot" and the nested wells are depicted on Figure 23.

The debris found was similar to the buried debris discovered in May 2000 that was excavated and disposed in July 2001 (See Section 8.1 for complete details). Small amounts of debris also were found surrounding SVE-31 shallow (s) and deep (d). To remove the debris around SVE-31s/d, these wells were removed and were subsequently reinstalled approximately two (2) feet to the north. The fifth set of SVE wells (centered in the lead impacted soils), along with approximately 78 cubic yards of buried debris and lead impacted soils were excavated and properly disposed of as hazardous waste during this time. Waste Disposal Documentation is located in Attachment 12. Soils were excavated to the groundwater table located at approximately 11-feet bgs. The excavation was backfilled and compacted with clay-rich fill material.

Test trenches were also dug to approximately four (4) feet bgs around the newly installed nested SVE wells in an attempt to locate any further buried debris. No additional debris was discovered during these trenching activities. Approximately 33 cubic yards of additional trenching spoils, generated during the installation of subsurface piping and test trenching, were properly disposed. See Attachment 6 for waste disposal documentation. See Figure 21 for layout of the SVE wells and subsurface piping installed back to existing subsurface piping of the Southwestern Remediation System.

Four (4) soil confirmation samples were collected from the sidewalls of the excavation approximately six (6) feet bgs. Bottom samples were not collected because groundwater was encountered at 11 feet bgs. Sample collection and analysis was performed according to the KERAMIDA SOPs presented in Attachment 6. The samples were analyzed for VOCs by EPA Method 8260B and total lead by EPA Method 6010 at data quality level (DQL) IV. See Figure 23 for the location of the soil excavation and confirmation sampling locations. Attachment 10 contains the SVE well construction diagrams, and Attachment 12 contains the waste disposal manifests.

Results of the confirmation sampling are provided in Tables 15 and 16, and depicted on Figures 14a and 14d. All four sidewall samples contained detectable lead concentrations below its respective Tier II Non-Residential and Residential Cleanup Goals. VOC analytical results indicate that the sample taken from the south sidewall (HS-SW) contained concentrations of TCE and DCE above their respective Tier II Non-Residential Cleanup Goals. Additionally the west wall sample (HS-WW) contained DCE at a concentration above its Tier II Non-Residential

Cleanup Goal. The north and east sidewall samples contained VOC concentrations below their respective Tier II Non-Residential Cleanup Goals. SVE is currently being performed in the "Hot Spot" area to further reduce residual VOC concentrations. Remedial progress will be monitored during routine operation and maintenance activities and annual soil sampling as proposed in the RWP. In accordance with Section 6.3.3 of the Remediation Work Plan, the first round of annual soil sampling will be completed in September 2004 to coincide with one (1) year of operation and maintenance (O&M) of the expanded Southwestern Remediation System.

8.4 MONITORING/CONFIRMATION SAMPLING PLAN

8.4.1 Remediation System Monitoring Plan

The goal is to assure continued operation of the remediation system and to maintain it such that it operates in the most efficient manner possible. Remediation system monitoring results will be documented in quarterly reports.

8.4.1.1 SVE/AS Portion

Weekly Site visits will be made to monitor remediation system operation, to collect system performance indicators and to conduct routine maintenance. Monthly effluent vapor samples will be collected from each soil vapor extraction blower and sent in for laboratory analysis for VOCs. An additional effluent vapor sample from each soil vapor extraction blower will be collected and analyzed for permanent gases on a quarterly basis. Annually two random soil borings will be advanced in the VOC and lead impacted soil "hot spot" area for the collection of soil samples to be analyzed for VOCs. See Section 9.0 Operation and Maintenance Plan and the Quality Assurance Project Plan found as Attachment 7 for complete details.

8.4.1.2 Phytoremediation

Monthly inspections will be conducted during the growing season and quarterly inspections will be conducted throughout the dormant period of each year. The growing season for the Site is estimated to be from April through October. If any trees show signs of distress, disease, or other abnormalities, remedial steps will be taken.

Leaf tissue and transpiration gas sampling and analysis will be completed from three randomly selected trees in June and September to coincide with the early and late stages of the growing season. The samples will be submitted for laboratory analysis for VOCs. The results of the

tissue and gas sampling and analysis will be used to evaluate the physical and chemical mechanisms at work in the remediation system, the potential for risk to ecological receptors from exposure to COPC-containing plant tissues, and potential COPC concentrations released to ambient air in the remediation area. See Section 9.0 Operation and Maintenance Plan for complete details.

8.4.1.3 Selective On-Site Groundwater Monitoring

On-Site groundwater monitoring will be completed quarterly from the following six (6) existing monitoring wells, MW-10-1, 132, 133R, 147, 148, 150 and 153 to evaluate remedial progress. Samples will be analyzed in the field for pH, dissolved oxygen, temperature and redox potential. Samples collected for laboratory analysis will be analyzed for VOCs at DQO Level II. See the Quality Assurance Project Plan found as Attachment 7 for complete details. See Figure 24 for locations of monitoring wells.

If the analytical results in all six (6) monitoring wells from four (4) consecutive quarterly groundwater sampling events displays asymptotic behavior near or drops below the IDEM VRP Tier II Non-Residential Closure Goals for VOCs, the remediation system will be shut down and selective monitoring will end.

8.4.2 On-Site Groundwater Monitoring Plan

On-Site groundwater monitoring will be completed annually from the following eleven (11) existing monitoring wells, MW-10-1R, 132, 133R, 135, 145, 146, 148, 150, 152, 153 and 154. Monitoring will be performed on an annual basis beginning one month following the approval of the RWP by the IDEM. Samples will be analyzed in the field for pH, dissolved oxygen, temperature and redox potential. Samples collected for laboratory analysis will be analyzed for VOCs, PAHs, Cadmium, Chromium and Lead at DQO Level II. See the Quality Assurance Project Plan found as Attachment 7 for complete details. On-Site groundwater monitoring results will be documented in quarterly reports. See Figure 24 for locations of monitoring wells.

Once the remediation system has been shut down as discussed in Section 8.4.1.3, sampling will change from annual to quarterly and samples will be analyzed at a DQO Level IV for groundwater confirmation purposes. Once the analytical results in all ten (10) monitoring wells from four (4) consecutive quarterly groundwater sampling events displays asymptotic behavior near or drops below the IDEM VRP Tier II Non-Residential Closure Goals for VOCs, PAHs,

Cadmium, Chromium and Lead, on-Site remedial objectives will be attained and the IDEM will be petitioned for on-Site closure.

8.4.3 Plume Stability Groundwater Monitoring Plan

Plume stability groundwater monitoring will be completed from the following seventeen (17) existing monitoring wells MW-10-1R, 132, 146, 148, 150, 151, 152, 153, 156, 157, 160, 161, 164, 165S, 166S, 167S and 169S. Monitoring well pairs 169S&D, 170S&D, 171S&D and 172S&D will not be monitored due to the presence of off-Site source(s) that would affect the evaluation of plume stability. Wells MW-165D, MW-166D, MW-167D, and MW-169D will also not be monitored for this reason. Monitoring will be performed on a quarterly basis beginning one month following the approval of the RWP by the IDEM. Samples will be analyzed in the field for pH, dissolved oxygen, temperature and redox potential. Samples collected for laboratory analysis will be analyzed for VOCs at DQO Level IV. See the Quality Assurance Project Plan found as Attachment 7 for complete details. Plume stability groundwater monitoring results will be documented in quarterly reports. See Figure 24 for locations of monitoring wells.

Once plume stability is achieved and the analytical results in all twenty-nine (29) monitoring wells display asymptotic behavior near or drop below the IDEM VRP Tier II Residential Closure Goals for VOCs, off-Site remedial objectives will be attained and the IDEM will be petitioned for off-Site closure.

8.5 DATA MANAGEMENT

A combined Operation & Maintenance (O&M) and Groundwater Monitoring Report will be prepared to document the operation, maintenance and monitoring of the remediation system and any groundwater monitoring performed on a quarterly basis.

The remediation system portion of the quarterly reports will include a summary of SVE/AS operation and maintenance over the quarter, the results of any vapor sampling data, estimates for VOC mass removal, Phytoremediation operation, maintenance and monitoring, results of annual VOC and Lead soil hot spot sampling and any other information pertinent to the remediation project. See Section 9.0 Operation and Maintenance Plan for complete details of data to be collected.

The groundwater monitoring portion of the quarterly reports will include a description of the monitoring and sampling procedures, deviations from the standard procedures, if any, tables and figures documenting the analytical results and groundwater elevation/flow, discussion of the results, and recommendations for any changes for future monitoring events. See the Quality Assurance Project Plan found as Attachment 7 for complete details of data to be collected.

9.0 OPERATION AND MAINTENANCE PLAN

The goal is to assure continued operation of the remediation system and to maintain it such that it operates in the most efficient manner possible. A copy of the NEPCCO – Groundwater Remediation System O&M Manual which contains Engineering drawings, component lists, start-up procedures and operation and maintenance manuals for each major piece of equipment can be found as Attachment 22.

9.1 NORMAL OPERATION & MAINTENANCE

Various logs and forms have been developed to document operation, maintenance and monitoring of the remediation system. Copies of these logs and forms can be found in Attachment 24.

9.1.1 Operation and Monitoring Tasks and Schedule

The following tasks will be conducted during O&M visits:

- Weekly SVE operational measurements.
- Weekly AS operational measurements.
- Monthly collection of effluent vapor samples for VOC analysis.
- Monthly readjustment of the applied vacuum and pressures at the vapor extraction and air sparging wells, if needed to maximize efficiency.
- Quarterly collection of effluent vapor samples for permanent gases analysis.
- Quarterly observed, applied, and induced vacuum and pressures groundwater monthly, groundwater dissolved oxygen (DO) and groundwater redox potential levels from drains, vapor extraction wells, air sparging points, and monitoring points within and around the treatment area.

- Quarterly collection of groundwater samples for field parameter and VOC analysis from monitoring wells, MW-10-1R, 132, 133R, 147A, 148, 150 and 153.
- Semi-annual collection of leaf tissue and transpiration gas sampling and analysis will be completed from three randomly selected trees in June and September to coincide with the early and late stages of the growing season.
- Annual collection of soil samples for field parameter and VOC analysis at two random locations within the treatment area.

See the Quality Assurance Project Plan found as Attachment 7 for complete details on the quarterly groundwater, annual soil, and semi-annual tree monitoring events.

9.1.2 Maintenance Tasks and Inspection Schedule

9.1.2.1 Phytoremediation

Monthly inspections will be conducted during the growing season and quarterly inspections will be conducted throughout the dormant period of each year. The growing season for the Site is estimated to be from April through October. If any trees show signs of distress, disease, or other abnormalities, remedial steps will be taken which may include, but are not necessarily limited to: tree replacement, mulching, pest control, fertilizing, pruning, watering, and reseeded. Irrigation will also be conducted, as needed, based on the findings of the inspections.

In accordance with the agreement between Genuine Parts Company and IPL, the following will be completed for the phytoremediation system within the IPL easement in the southwestern portion of the Site:

- The maximum height of the poplar trees will be maintained to below 15 feet. If at any time this height is exceeded, the particular tree(s) will be trimmed.
- The poplar trees will be cut down in the spring of 2004 to within 2 feet of the ground surface and thereafter every three (3) years.
- The poplar trees on the IPL easement will be removed upon the completion of the project.
- If IPL has to contact KERAMIDA to maintain the poplar trees more than once, then IPL has the right to cut down the poplar trees.

9.1.2.2 Other

Task/Instrumentation	Frequency
Valves/fittings – check for damage including cracks and leaks	Monthly
Gauges – check for damage and re-zero	Monthly
Indicator / alarm lights – check for and replace burnt bulbs	Monthly
Separator – check for sediments, damage, and clean as necessary	Monthly
Air filters – check filter condition and clean / change as needed.	Monthly
SVE blower – check line voltage, motor amps & grease fittings	Weekly
SVE blower – drain and replace oil	Every 1,000 hours
Air Compressors – check line voltage & motor amps	Weekly
Air Compressors –replace oil filter	Every 1,500 hours
Air Compressors – drain and replace oil	Every 4,000 hours

9.1.3 Optimum Operating Conditions

EASTERN SYSTEM

Parameter	Operating Condition
Soil Vapor Extraction Wells	10-15-inches of H ₂ O vacuum/well 25-foot Radius of Influence
Soil Vapor Extraction Blower	35-40-inches of H ₂ O vacuum @ inlet (60-inches of H ₂ O vacuum @ blower) 200-250 CFM of influent air flow
AS Wells	5psi @ 5 CFM 20-foot Radius of Influence
Air Compressor	100psi @ outlet (25-30psi @ regulator) 75 CFM of effluent air flow @ outlet

NORTHWEST SYSTEM

Parameter	Operating Condition
Soil Vapor Extraction Wells	20-25-inches of H ₂ O vacuum/well 25-foot Radius of Influence
Soil Vapor Extraction Blower	30-35-inches of H ₂ O vacuum @ inlet (80-inches of H ₂ O vacuum @ blower) 200-250 CFM of influent air flow
AS Wells	5psi @ 5 CFM 20-foot Radius of Influence
Air Compressor	100psi @ outlet (25-30psi @ regulator) 75 CFM of effluent air flow @ outlet

SOUTHWEST SYSTEM

Parameter	Operating Condition
Soil Vapor Extraction Wells	15-20-inches of H ₂ O vacuum/well 25-foot Radius of Influence
Soil Vapor Extraction Blower	35-40-inches of H ₂ O vacuum @ inlet (80-inches of H ₂ O vacuum @ blower) 200-250 CFM of influent air flow
AS Wells	5psi @ 5 CFM 20-foot Radius of Influence
Air Compressor	100psi @ outlet (25-30psi @ regulator) 75 CFM of effluent air flow @ outlet

9.1.4 Waste Management

During normal O&M activities certain liquid wastes will be generated. Liquid wastes will be generated by the draining of condensate from the vapor extraction blower knock-outs and during groundwater sampling. A 400-gallon poly tank will be used to store these liquids and Liquid Waste Removal, Inc. of Indianapolis, Indiana has been contracted to remove and haul the condensate and groundwater generated for treatment/disposal at Perma-Fix located in Dayton, Ohio per applicable Federal, State, and Local regulations.

9.1.5 Health & Safety

All work will be completed in accordance with the Site-specific "Health & Safety Plan". A copy of this plan is located at the Site and can be found as Attachment 8.

9.2 POTENTIAL OPERATING PROBLEMS

Most typical operational problems arise from devices such as air/water separators (knock-outs), blowers, air compressors and air particulate filters. The following sections discuss these and other sources for potential operational problems, and common fixes for these problems.

9.2.1 Potential Sources of Operational Problems

- Air/water separators separate water and soil vapors from each other. Sediments often accumulate on the bottoms of the separators as the water is waiting for transfer. This can clog the discharge line from the separator backing up water and causing a high water alarm, which shuts down the system.

- Motor starters for blowers and air compressors can burn out, or trip due to thermal overload (high amperage), and/or high temperature.
- Blower and air compressors can lose lubrication causing undue wear to the motors.
- Indicator and alarm light bulbs can burn out.

9.2.2 Common Remedies of Operational Problems

The actual sources of problems and failures associated with the remediation system can and will be identified during scheduled maintenance and inspection tasks.

- Air/Water Separators will be inspected monthly and cleaned as required to stop the accumulation of sediments on the bottoms of the separators.
- Blower and air compressor voltages, motor amperages and temperatures will be checked weekly to make sure these motors are operating within motor nameplate values.
- Blower motors will be lubricated with grease weekly and their oil changed every 1,000 hours.
- Air compressor motor oil will be changed every 4,000 hours.
- Air particulate filters for the blowers and air compressors will be inspected monthly and cleaned as required.
- Indicator and alarm lights will be checked (push-to-test type) monthly and burnt lights will be replaced as required.

9.3 CONTINGENCY OPERATION & MAINTENANCE PLAN

A contingency O&M Plan has been prepared and may be implemented, if necessary, to minimize system down time due to any sudden or non-sudden breakdown of the remedial equipment or the treatment process.

9.3.1 Alternative Operational Procedures

None; the remediation systems will automatically shut down or will be manually shut down if discharge limits are exceeded.

9.3.2 Notification Procedures

The following procedures will be followed in case of system operational problems.

- Any system operational problems will be first reported to the project manager via the telephone.
- Once the project manager has been notified, the reporting technician and project manager will discuss the specific problems and possible remedies. The problems will be fixed while on-Site by the technician, if possible.
- The O&M Log and Maintenance Sheets found in Attachment 24 will be used to document problems, any work performed to fix the problems, or possible actions needed to fix them during the next visit.
- If problems cannot be fixed by technician while on-Site, the project manager will procure the needed materials to remedy the problems, and schedule the next Site visit as soon as possible.
- Problems that result in system(s) down time greater than one week will be reported to Genuine Parts Company. And any problems that result in the need for system modifications for the treatment process will be reported to Genuine Parts Company and to the IDEM VRP Representative. See Section 9.3.3 for Remediation System Modification Procedures.

9.3.3 Remediation System Modification Procedures

The following procedures will be followed prior to the start of any remediation system modifications to the treatment process. Remediation system modifications include any and all additions and/or deletions of treatment equipment.

- System modification needs will be reported to Genuine Parts Company.
- A proposal including reasoning for any remediation system modifications and associated costs will be prepared and submitted to Genuine Parts Company.
- Once the proposal is reviewed and any comments are discussed and incorporated, a letter will be prepared and submitted to the IDEM VRP Representative discussing the need for any remediation system modifications.
- Once the IDEM VRP Representative has reviewed the letter and any comments are discussed by both IDEM and Genuine Parts Company, any comments will be incorporated, as appropriate, and remediation system modifications will begin.

10.0 COMMUNITY RELATIONS

This section presents Genuine Part's plan for keeping the IDEM and the general public informed regarding the remedial work at the Former General Motors Corporation Allison Gas Turbine Division Plant 10. The plan provides a basis for communicating the appropriate information to the IDEM and the public.

10.1 AFFECTED PROPERTY OWNERS

Findings of investigations completed at the Site indicate the presence of VOCs in groundwater off-Site to the southeast and south across Little Eagle Creek. A list of addresses where VOCs have been identified in groundwater is presented below. VOC occurrence in groundwater southeast of the Site is markedly different than that detected to the south. To the southeast, VOC occurrence is limited in the upper sand unit and TCE is a major contaminant. South of Little Eagle Creek, TCE is absent from the groundwater and detected VOC concentrations are greatest in the deep zone of the upper sand unit. The characteristics of dissolved VOC occurrence in this area differ greatly from the eastern source area of the Site and indicate the presence of an off-Site source or sources. Soil data collected during the investigations also confirm the presence of an off-Site source(s) off-Site to the south.

A potable water supply well is present at 709 Olin Avenue. Probable potable water supply wells are also located southeast of the Site at 601 and 605 Luett Avenue and south of the Site at 3908 and 3910 Cossell Road. All five of the locations are residential properties. Water well construction records were only publicly available for the two wells present on Cossell Road. The wells have intake screen intervals at approximately 45 to 50 feet below ground surface (bgs). This depth coincides with the deep zone of the upper sand unit.

Groundwater analytical data indicate that detectable VOC concentrations are likely present in the deep zone of the sand unit in the area of the water supply wells located on Cossell Road. As previously discussed, VOCs present in the deep zone off-Site to the south appear to be from a source or sources not related to the Site. Groundwater data also indicate that detectable VOC concentrations may be present in the upper sand unit in the area of the probable water supply wells located on Luett Avenue. If present, the construction of these wells is not known. Data collected from deep monitoring wells located on-Site and southeast of the Site, indicate VOC occurrence is limited to shallow groundwater in this area. Groundwater data collected by KERAMIDA, as well as water supply well data collected by the Marion County Health Department, indicate the known supply well located at 709 Olin Avenue is not impacted by VOCs.

All properties indicated on the list below should be notified that VOC contaminated groundwater may be present beneath their properties. They should be informed of the findings of the Risk Assessment and counseled on the potential implications of the contamination. The presence, construction, and use of the possible water supply wells identified on Luett Avenue and Cossell Road should be confirmed with the property owners. Findings of the discussion with the property owners should be used to evaluate the need to sample these wells, if present.

601 Olin Avenue	717 Olin Avenue	654 Luett Avenue
609 Olin Avenue	721 Olin Avenue	702 Luett Avenue
611 Olin Avenue	602 Luett Avenue	700 Luett Avenue
623 Olin Avenue	606 Luett Avenue	708 Luett Avenue
621 Olin Avenue	612 Luett Avenue	712 Luett Avenue
625 Olin Avenue	614 Luett Avenue	716 Luett Avenue
627 Olin Avenue	618 Luett Avenue	722 Luett Avenue
629 Olin Avenue	620 Luett Avenue	3910 Cossell Rd.
637 Olin Avenue	628 Luett Avenue	3908 Cossell Rd.
639 Olin Avenue	630 Luett Avenue	3839 Michigan St.
701 Olin Avenue	636 Luett Avenue	3835 Michigan St.
707 Olin Avenue	642 Luett Avenue	3817 Michigan St.
709 Olin Avenue	646 Luett Avenue	3811 Michigan St.
715 Olin Avenue	650 Luett Avenue	3800 Michigan St.

10.2 COMMUNITY ORGANIZATIONS

Community organizations were not located within the area search.

10.3 SAMPLE NOTICE

A notice similar to the following will be mailed via certified mail to the above-referenced property owners, organizations and institutions.

This notice is being provided to inform you of the presence of a Site in your neighborhood that has been accepted into Indiana Department of Environmental Management's (IDEM) Voluntary Remediation Program. This notice is a requirement of a Community Relations Plan that has been developed by the Applicant and is a component of the Remediation Work Plan for the Site that is available for review at the repository listed below. The Community Relations Plan includes provisions for notifying

all neighboring property owners and occupants, neighborhood organizations and other local entities. In addition, the Community Relations Plan may require the applicant to post an informational sign at the subject property. For additional information about the Community Relations Plan and the Remediation Work Plan, please review the documents in the repository or contact the IDEM Project Manager at (317) 234-0971.

The proposed project entails the remediation of volatile organic compounds (VOCs) and lead in soil and VOCs in groundwater at the former General Motors Corporation, Allison Gas Turbine Division, Plant 10 Facility. The sources of the VOCs and lead have been removed. The remediation will primarily focus on the treatment of residual VOC in soil and groundwater using soil vapor extraction and air sparging technologies. A lead "hot spot" in soil will be excavated and removed from the Site. Phytoremediation will be conducted along the downgradient property boundary to further mitigate dissolved contaminant occurrence.

The IDEM will accept public comments regarding the Remediation Work Plan for a period of 30 days after the mailing of this notice. Comments are to be provided in writing and must be received by the IDEM Project Manager prior to the end of the 30 day period. Comments should be sent to:

*William Wieringa
VRP Project #6991004
Indiana Department of Environmental Management
Office of Land Quality
P.O. Box 6015
Indianapolis, Indiana 46202-6015*

A copy of the Remediation Work Plan is available for public review at the Indianapolis Marion County Library, at the Haughville Branch, located at 2121 West Michigan Street, Indianapolis, IN 46222.

10.4 LOCAL GOVERNMENT UNITS

The only governmental units within 1 mile are the City of Indianapolis and the Marion County. The IDEM will be responsible for providing notifications to these entities.

City of Indianapolis, Mayor Bart Peterson, 2501 City-County Building, 200 E. Washington Street, Indianapolis, Indiana 46204.

Marion County Health Department, Rosemarie Neimeyer Hansell, Environmental Health Specialist, 3838 North Rural St., Suite 520, Indianapolis, IN 46205.

10.5 LOCAL NEWSPAPERS

The local newspaper in the area is the Indianapolis Star, 307 N. Pennsylvania St., Indianapolis, IN 46204.

10.6 PUBLIC REPOSITORY

The public repository selected for public display of the Remediation Work Plan is the Indianapolis Marion County Library, at the Haughville Branch, located at 3815 West Michigan Street, Indianapolis, IN 46222..

- The VRP applicant will make a reasonable effort to notify all potentially affected parties via certified mail.

11.0 COMPLETION OF REMEDIAL ACTION

A Completion Report detailing the remediation system and confirmation sampling will be submitted upon completion of the remediation to the cleanup criteria. Future use of the Site will be expected to remain as a Non-Residential property.

A Completion Report detailing plume stability monitoring will be submitted upon completion of the remediation to the cleanup criteria.

12.0 SCHEDULE

The schedule for the project generally consists of continued O&M and quarterly selective and annual/quarterly confirmation on-Site groundwater monitoring and quarterly plume stability

groundwater monitoring. The projected work schedule is described in general terms below. A detailed schedule is provided on Figure 25.

It is estimated that the groundwater in the source area will be remediated to the proposed Closure Goals in 3 to 4 years, the VOC impacted soil "hot spot" area in 2 to 3 years, and the anomalous VOC area to the east in 1 to 2 years. Quarterly selective and annual on-Site groundwater monitoring will take place over 3 to 4 years. Once quarterly selective on-Site groundwater sampling ends when the remediation system is shut down as described in Section 7.4.1.3, annual on-Site groundwater monitoring will be conducted quarterly for confirmation purposes. Quarterly plume stability groundwater monitoring will take place over 7 years.

The resulting schedule indicates that the estimated time for achieving closure for the Site is just over seven years.

13.0 COST ESTIMATE

Total costs to date are approximately \$2,500,000. This total includes investigation and groundwater sampling events, geophysical surveys, buried waste debris excavation, transportation and disposal activities, remediation system installation, start-up and one year of O&M, Phase II Reporting, VRP Application, and this RWP. Remaining remediation and monitoring costs as described in Section 10.0 are approximately \$950,000.

14.0 USE OF REPORT

This report has been prepared for the exclusive use of the Client and persons or organizations to which the Client wishes to make this report available. This report and the findings, conclusions and recommendations contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, or used by or relied upon by any other party, without the prior written consent of KERAMIDA.

15.0 LIMITATIONS

This RWP was prepared in accordance with KERAMIDA contractual guidelines set for subsurface investigations. KERAMIDA's professional opinions contained herein are based upon the sampling conducted by KERAMIDA personnel during the subsurface investigation. No other warranty is given or implied by this report.

16.0 REFERENCES

- American Society of Testing Materials (ASTM). 1995. *Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites (RBCA)* E1739-95. November 1995.
- Bouwer, H. and R.C. Rice. 1976. *A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers with Completely or Partially Penetrating Wells*. Water Resources Research Vol. 12 pp. 423-428.
- Cowherd, C., G. Muleski, P. Englehart, and D. Gillette. 1985. *Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination (EPA/600/8-85/002)*. Prepared for EPA Office of Health and Environmental Assessment.
- Dragun, James, Ph.D. and Chaisson, Andrew. 1991. *Elements in North American Soils*. Hazardous Materials Control Resources Institute. Greenbelt, Maryland. Copyright 1991.
- Engineering Science, Inc. 1992. *Phase I Information Review Report for General Motors Corporation Allison Gas Turbine Division*. July.
- Engineering Science, Inc. 1993. *Phase II Site Assessment Final Report for General Motors Corporation Allison Gas Turbine Division*. November 19.
- Flood Insurance Rate Map.
- Fluor Daniel GTI. 1997a. *Feasibility Study Report for General Motors-Allison Gas Turbine Plant 10*. June 3.
- Fluor Daniel GTI. 1997b. *Remedial Investigation Report for General Motors-Allison Plant 10*. September 19.
- Gary, H., C. Ault, and S. Keller. 1987. *Bedrock Geologic Map of Indiana*. Miscellaneous Map 48. Indiana Geological Survey.
- Gray, H., N.K. Bleuer, J.R. Hill, and J.A. Lineback. 1979. *Regional Geologic Map No. 1, Indianapolis Sheet Part B*. Indiana Geological Survey.
- Gray, Henry. 1989. *Quaternary Geologic Map of Indiana*. Miscellaneous Map 49. Indiana Geological Survey.
- Harrison, W. 1963. *Geology of Marion County, Indiana*. Indiana Geological Survey. Bulletin No. 28, 78 p.
- Hartke, E.J., Ault, C.H., Austin, G.S., Becker, L.E., Bleuer, N.K., Herring, W.C., and Moore, M.C. 1980. *Geology for Environmental Planning in Marino County, Indiana*. Bloomington, Ind., Indiana Geological Survey Special Report 19, 53 p..

- Hoggatt, R.E. 1975. *Drainage Areas of Indiana Streams*, U.S. Geological Survey, 231 p.
- Indiana Department of Environmental Management (IDEM). 1996. Resource Guide. Voluntary Cleanup Program.
- IDEM. 1994. *Calculation of Tier II Cleanup Goals Based on Human Health Evaluation*.
- IDEM. 2001. "RISC Technical and Users Guides." February 15.
- Indiana Register. 1993. 327 IAC 2-1-6. *Minimum Surface Water Quality Standards*. November 19.
- KERAMIDA Environmental, Inc. 2002. *Phase II Investigation Report, Former General Motors Corporation, Allison Gas Turbine Division Plant 10, 700 North Olin Avenue, Indianapolis, Indiana*. March 29.
- Lyman, W.J., W.F. Reehl, D.H. Rosenblatt. 1993. *Handbook of Chemical Property Estimation Methods*. American Chemical Society. Third Printing.
- Meyer, W., J. Reussow, and D. Gillies. 1975. *Availability of Ground Water in Marion County, Indiana*. Open-File Report 75.312. United States Department of the Interior, Geological Survey.
- Mundell and Associates. 2003. *Air Quality Investigation Report, Michigan Meadows Apartment and Michigan Plaza Shopping Center, 3800-3823 West Michigan Street, Indianapolis Indiana*. June 9.
- National Oceanic and Atmospheric Administration. 1989. *Local Climatological Data, Annual Summary with Comparative Data, Indianapolis, Indiana*. United States Department of Commerce.
- National Wetlands Inventory Map.
- O'Brien & Gere Engineers, Inc. 1994. *Buyer Environmental Assessment*. Allison Engine Company, Inc. May.
- Off-Site Groundwater - VRP Tier II Residential Cleanup Goals for Groundwater.
- Off-Site Sediment - VRP Residential Cleanup Goals for Surface Soil.
- Off-Site Subsurface Soil - VRP Tier II Residential Cleanup Goals for Subsurface Soil.
- Off-Site Surface Water - VRP Tier II Residential Cleanup Goals for Groundwater.
- On-site Groundwater - VRP Tier II Non-Residential Cleanup Goals for Groundwater.
- On-Site Subsurface Soil - VRP Tier II Non-Residential Cleanup Goals for Subsurface Soil.

On-Site Surface Soil - VRP Tier II Non-Residential Cleanup Goals for Surface Soil.

Stewart, James A. 1983. *Low-Flow Characteristics of Indiana Streams*. U.S. Geological Survey Open File Report 82-1007.

Sturm, R.H. and R.H. Gilbert. 1978. *Soil Survey of Marion County, Indiana*. United States Department of Agriculture, Soil Conservation Service. 63 p.

Suter, G.W. 1996. *Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Freshwater Biota*. Environmental Toxicology and Chemistry, Vol. 15, No. 7, pp. 1232-1241.

U.S. Department of Agriculture (USDA). 1991. *Soil Survey for Marion County, Indiana*. Soil Conservation Service.

United States Department of Interior (USDOI). 1990. *National Wetlands Inventory Map-Indianapolis West, IND*. USDOI Fish and Wildlife Service.

United States Environmental Protection Agency (USEPA). 1994. *Data Quality Levels*. RCRA Permitting Branch. July 1994.

USEPA. 1987. *Quality Criteria for Water 1986*. Office of Water, Regulations and Standards. 1987. EPA 440/5-86-001.

USEPA. 1989a. *Risk Assessment Guidance for Superfund (RAGS), Human Health Evaluation Manual, Interim Final*. Office of Solid Waste and Emergency Response: Washington, D.C.

USEPA. 1989b. *Exposure Factors Handbook*. Office of Solid Waste and Emergency Response: Washington, D.C.

USEPA. 1991. *Risk Assessment Guidance for Superfund: Volume 1 - Human Health Evaluation Manual (Part B, Development of Risk Based Preliminary Remediation Goals)*. Office of Emergency and Remedial Response.

USEPA. 1994. *Technical Background Document for Soil Screening Guidance*. Office of Solid Waste and Emergency Response. EPA/540/R-94/106. December 1994.

USEPA. 2001. *RCRA Draft Supplemental Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway (Vapor Intrusion Guidance)*. December.

United States Geological Survey (USGS). 1994. *Hydrogeologic Atlas of Aquifers in Indiana*. Water Resources Investigations Report 92-4142.

Voelker, David C., Willoughby, Timothy C. 2001. *Streamflow, Surface-Water Quality, and Quality of Streambed Sediments in Little Buck Creek and Little Eagle Creek*.

Indianapolis, Indiana, 1990-1994. U.S. Geological Survey Water-Resources Investigations Report 00-4289.

Walton, W.C. 1988. *Practical Aspects of Groundwater Modeling.* National Water Well Association, Worthington, Ohio.

Wier, C.E., and Gray, H.H. 1961. *Regional Geologic Map, Indianapolis Sheet: Bloomington, Ind.,* Indiana Geological Survey, 1 sheet, scale 1:250,000.

Table 1
City Directory Search
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Year	City Directory	Findings
1959	Indianapolis Suburban City Directory	Residential
1960	Indianapolis Suburban City Directory	Residential
1961	Indianapolis Suburban City Directory	Residential
1962	Indianapolis Suburban City Directory	Residential
1963	Indianapolis Suburban City Directory	Residential
1964	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments
1965	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments
1966	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments
1967	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments
1968	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments
1969	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments, 3807 Sherry Lynn Beauty Shop, 3809 Michigan Plaza Barber Shop, Hosiery Shop, 3815 Cloverleaf Real Estate, 3823 Michigan Plaza Coin Laundry
1970	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments, 3807 Plaza Boutique Salon, 3809 Michigan Plaza Barber Shop, 3815 Cloverleaf Real Estate, 3819 Neff Cleaners , 3823 Michigan Plaza Coin Laundry
1971	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments, 3807 Plaza Boutique Salon, 3809 Michigan Plaza Barber Shop, 3815 Cloverleaf Real Estate, 3819 Accent Cleaners , 3823 Michigan Plaza Coin Laundry
1972	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments, 3801 Short Stop Market, 3805 Michigan Plaza Pharmacy, 3807 Plaza Boutique Salon, 3819 Accent Cleaners , 3823 Michigan Plaza Coin Laundry
1973	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments, 3801 Short Stop Market, 3805 Michigan Plaza Pharmacy, 3815 Indianapolis Marion County Public Library, 3819 Accent Cleaners , 3823 Michigan Plaza Coin Laundry
1974	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments, 3801 Short Stop Market, 3805 Michigan Plaza Pharmacy, 3815 Indianapolis Marion County Public Library, 3819 Accent Cleaners , 3823 Michigan Plaza Coin Laundry, 3937 Arrows Taxidermy
1975	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments, 3801 Short Stop Market, 3805 Michigan Plaza Pharmacy, 3815 Indianapolis Marion County Public Library, 3819 Accent Cleaners , 3823 Michigan Plaza Coin Laundry
1976	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments, 3801 Short Stop Market, 3805 Michigan Plaza Pharmacy, 3815 Indianapolis Marion County Public Library, 3819 Accent Cleaners , 3823 Michigan Plaza Coin Laundry
1977	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments, 3801 Short Stop Market, 3807 Plaza Boutique Salon, 3815 Indianapolis Marion County Public Library, 3819 Accent Cleaners , 3823 Michigan Plaza Coin Laundry
1978	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments, 3801 Short Stop Market, 3807 Plaza Boutique Salon, 3815 Indianapolis Marion County Public Library, 3819 Accent Cleaners , 3823 Michigan Plaza Coin Laundry
1979	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments, 3801 Short Stop Market, 3805 Tyndalls Health Club, 3809 Pizza Time, 3815 Indianapolis Marion County Public Library, 3819 Accent Cleaners , 3823 Michigan Plaza Coin Laundry
1980	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments, 3801 Short Stop Market, 3809 Pizza Time, 3815 Indianapolis Marion County Public Library, 3819 Accent Cleaners , 3823 Michigan Plaza Coin Laundry

Table 1
City Directory Search
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Year	City Directory	Findings
1981	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments, 3801 Short Stop Market, 3815 Indianapolis Marion County Public Library, <i>3819 Accent Cleaners</i> , 3823 Michigan Plaza Coin Laundry
1982	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments, 3801 Short Stop Market, 3815 Indianapolis Marion County Public Library, <i>3819 Accent Cleaners</i> , 3823 Michigan Plaza Coin Laundry
1983	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments, 3801 Short Stop Market, 3815 Indianapolis Marion County Public Library, <i>3819 Accent Cleaners</i> , 3823 Michigan Plaza Coin Laundry
1984	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments, 3801 Short Stop Market, 3805 Alpha 1 Dog Training, 3815 Indianapolis Marion County Public Library, <i>3819 Accent Cleaners</i> , 3823 Michigan Plaza Coin Laundry
1985	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments, 3801 Short Stop Market, 3815 Indianapolis Marion County Public Library, <i>3819 Accent Cleaners</i> , 3823 Michigan Plaza Coin Laundry
1986	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments, 3801 Village Pantry, 3809 Mc Cloud Pest Control, 3815 Indianapolis Marion County Public Library, <i>3819 Accent Cleaners</i> , 3823 Michigan Plaza Coin Laundry
1987	Indianapolis Suburban City Directory	3800 Michigan Meadows Apartments, 3801 Village Pantry, 3805 EZ Rentals Inc., 3809 Mc Cloud Pest Control, 3815 Indianapolis Marion County Public Library, <i>3819 Accent Cleaners</i> , 3823 Michigan Plaza Coin Laundry
2001	Indianapolis/Marion County City Directory	3801 Village Pantry, 3805 Haughville Library, 3815 National Handicapped Workshop (Packaging Labeling)

Table 2
Sampling and Analysis Plan
Former General Motors Corporation
Allison Gas Turbine Division, Plant #10
Indianapolis, Indiana
IDEM VRP# 6991004
KERAMIDA Project No. 2829E

Boring / Well Number	Location Rationale	Method	Total Depth (ft)	Soil			Groundwater		
				Sample Depth (ft)	Sampling Rationale	Lab Testing	Sample Depth (ft)	Sampling Rationale	Lab Testing
KB-48	North of MW-162 in Olin Avenue (right-of- way)	Geoprobe	20	12-14'	Field Observations	PAHs, VOCs	12-17'	First GW encountered	PAHs, VOCs
KB-49	Northeast of MW-162 (in alley way)	Geoprobe	22	14-16'	Highest PID Reading	PAHs VOCs	18-22'	First GW encountered	PAHs, VOCs
KB-50	East of MW-162 (in alley way)	Geoprobe	24	18-20'	Field Observations	PAHs VOCs	20-24'	First GW encountered	PAHs, VOCs
KB-51	South of MW-163 in Olin Avenue (right-of- way)	Geoprobe	20	14-16'	Highest PID Reading	PAHs VOCs	15-20'	First GW encountered	PAHs, VOCs

KB = KERAMIDA Boring
PAH = Polynuclear Aromatic Hydrocarbons
VOC = Volatile Organic Compounds

PID = Photoionization Detector

Table 3a
Water Level Data Summary
Former Genuine Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Upper Sand Unit Monitoring Wells

Monitoring Well ID	TOC Elevation ⁽¹⁾ (feet amsl)	Ground Elevation ⁽¹⁾ (feet amsl)	Screen Interval (feet bgs)	Screen Depth (feet amsl)	Date Gauged	DTW (feet)	GW Elevation (feet amsl)	Average GW Elevation (feet amsl)	Minimum GW Elevation (feet amsl)	Maximum GW Elevation (feet amsl)	GW Fluctuation (feet)
MW10-1	714.04	NA	7-17	707.04-697.04	07/14/95	14.07	699.97				
					09/11/95	14.25	699.79				
					02/05/97	12.75	701.29				
					11/22/99	14.53	699.51				
					02/28/00	14.37	699.67				
	713.71	712.30	7-17	706.71-696.71	11/07/00	14.62	699.09				
					06/21/01	NA	NA				
					07/24/01	14.40	699.31				
					01/30/02	14.25	699.46				
					07/19/02	13.45	700.26				
MW-10-1R	714.00	711.75	7-17	704.75-694.75	05/07/03	11.21	699.36	699.77	699.09	701.29	2.20
					12/03/03	14.35	699.65				
					03/10/04	11.73	702.27				
MW-132	712.17	NA	10-20	702.17-692.17	06/02/04	14.31	699.69	700.54	699.65	702.27	2.62
					07/14/95	11.39	700.78				
					09/11/95	11.49	700.68				
					02/05/97	10.25	701.92				
					02/26/97	11.17	701.00				
					11/22/99	12.15	700.02				
	712.19	712.70	10-20	702.19-692.19	02/28/00	10.76	701.41				
					11/07/00	dry	NA				
					06/21/01	NA	NA				
	712.22	712.57	10-20	702.22-692.22	07/24/01	11.72	700.50				
					01/30/02	11.97	700.25				
					07/22/02	11.98	700.24				
					05/07/03	11.35	700.87				
					12/03/03	11.72	700.50				
					03/10/04	11.46	700.76				
MW-133	708.79	NA	8-18	700.79-690.79	06/02/04	11.09	701.13	700.77	700.02	701.92	1.90
					09/11/95	8.84	699.95				
					02/05/97	7.29	701.50				
					11/22/99	8.34	700.45				
	708.83	709.10	8-18	700.83-690.83	02/28/00	8.61	700.18				
					11/07/00	NA	NA				
					06/21/01	NA	NA				
					07/24/01	NA	NA				
					01/30/02	NA	NA	700.52	699.95	701.50	1.55

Table 3a - Upper Sand Unit Water Level Data
Page 1 of 11

Table 3a
Water Level Data Summary
Former Genuine Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Upper Sand Unit Monitoring Wells

Monitoring Well ID	TOC Elevation ⁽¹⁾ (feet amsl)	Ground Elevation ⁽¹⁾ (feet amsl)	Screen Interval (feet bgs)	Screen Depth (feet amsl)	Date Gauged	DTW (feet)	GW Elevation (feet amsl)	Average GW Elevation (feet amsl)	Minimum GW Elevation (feet amsl)	Maximum GW Elevation (feet amsl)	GW Fluctuation (feet)
MW-133R	709.03	--	7-17	--	12/04/03	9.76	699.27				
					03/10/04	9.19	699.84				
					06/02/04	8.95	700.08	699.73	699.27	700.08	0.81
MW-135	713.69	NA	10-20	703.69-693.69	07/14/95	13.26	700.43				
					09/11/95	13.66	700.03				
					02/05/97	11.96	701.73				
					02/26/97	12.47	701.22				
					11/22/99	14.20	699.49				
					02/28/00	14.05	699.64				
	713.70	714.10	10-20	703.70-693.70	11/07/00	14.12	699.58				
					06/20/01	13.85	699.85				
					07/24/01	13.67	700.03				
					01/30/02	13.80	699.90				
					07/15/02	12.05	701.65				
					12/03/03	13.01	700.69				
					03/10/04	12.97	700.73				
					06/02/04	12.35	701.35	700.45	699.49	701.73	2.24
MW-145	707.90	NA	18-28	689.90-679.90	07/14/95	8.85	699.05				
					09/11/95	8.85	699.05				
					02/05/97	7.43	700.47				
					11/22/99	9.10	699.80				
					02/28/00	8.62	699.28				
	707.94	709.00	18-28	689.94-679.94	11/07/00	8.74	699.20				
					06/21/01	8.82	699.12				
	707.98	708.64	18-28	689.98-679.98	07/24/01	8.78	699.20				
					01/30/02	8.05	699.93				
					07/22/02	8.89	699.09				
					12/04/03	8.85	699.13				
					03/10/04	8.93	699.05				
					06/02/04	8.51	699.47	699.37	699.05	700.47	1.42

Table 3a
Water Level Data Summary
Former Genuine Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Upper Sand Unit Monitoring Wells

Monitoring Well ID	TOC Elevation ⁽¹⁾ (feet amsl)	Ground Elevation ⁽¹⁾ (feet amsl)	Screen Interval (feet bgs)	Screen Depth (feet amsl)	Date Gauged	DTW (feet)	GW Elevation (feet amsl)	Average GW Elevation (feet amsl)	Minimum GW Elevation (feet amsl)	Maximum GW Elevation (feet amsl)	GW Fluctuation (feet)
MW-146	708.67	NA	15-25	693.67-683.67	07/14/95	9.41	699.26				
					09/11/95	9.44	699.23				
					02/05/97	7.95	700.72				
					11/22/99	9.73	698.94				
					02/28/00	9.91	698.76				
	708.71	709.10	15-25	693.71-683.71	11/07/00	8.95	699.76				
					06/21/01	9.48	699.23				
					07/24/01	9.51	699.20				
					01/30/02	9.31	699.40				
					07/15/02	10.09	698.62				
					12/03/03	9.5	699.21				
					12/19/03	9.5	699.21				
					03/10/04	9.46	699.25				
					06/02/04	9.12	699.59	699.32	698.62	700.72	2.10
MW-147	711.88	NA	20-30	691.88-681.88	07/14/95	11.09	700.79				
					09/11/95	11.20	700.68				
					02/05/97	9.91	701.97				
					11/22/99	11.49	700.39				
					02/28/00	11.44	700.44				
	711.53	711.60	20-30	691.53-681.53	11/07/00	11.40	700.13	700.73	700.13	701.97	1.84
MW-147A	711.61	712.07	20-30	691.61-681.61	06/21/01	12.46	699.15				
					07/24/01	11.22	700.39				
					01/30/02	11.34	700.27				
					07/22/02	11.06	700.55				
					05/07/03	11.5	700.11				
					12/03/03	11.14	700.47				
					03/10/04	10.79	700.82				
					06/02/04	10.45	701.16	700.37	699.15	701.16	2.01

Table 3a
Water Level Data Summary
Former Genuine Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Upper Sand Unit Monitoring Wells

Monitoring Well ID	TOC Elevation ⁽¹⁾ (feet amsl)	Ground Elevation ⁽¹⁾ (feet amsl)	Screen Interval (feet bgs)	Screen Depth (feet amsl)	Date Gauged	DTW (feet)	GW Elevation (feet amsl)	Average GW Elevation (feet amsl)	Minimum GW Elevation (feet amsl)	Maximum GW Elevation (feet amsl)	GW Fluctuation (feet)
MW-148	711.00	NA	10.5-25.5	700.50-685.50	07/14/95	10.43	700.57				
					09/11/95	10.50	700.50				
					02/05/97	8.25	702.75				
					02/26/97	10.15	700.85				
					11/22/99	11.50	699.50				
					02/28/00	10.36	700.64				
	711.04	712.00	10.5-25.5	700.54-685.51	11/07/00	10.90	700.14				
					06/21/01	10.73	700.31				
	711.07	712.00	10.5-25.5	700.57-685.57	07/24/01	10.55	700.52				
					01/30/02	10.73	700.34				
					07/22/02	11.31	699.76				
					05/07/03	11.25	699.82				
					12/03/03	10.31	700.76				
					03/10/04	10.16	700.91				
					06/02/04	10.11	700.96	700.56	699.50	702.75	3.25
MW-150	712.93	NA	4-19	708.93-693.93	09/11/95	13.30	699.63				
					02/05/97	11.75	701.18				
					11/22/99	13.57	699.36				
					02/28/00	13.50	699.43				
					11/07/00	13.80	699.10				
	712.90	713.30	4-19	708.90-693.90	06/20/01	13.51	699.39				
					07/24/01	12.88	700.08				
	712.96	713.38	4-19	708.96-693.96	01/30/02	13.76	699.20				
					07/19/02	12.18	700.78				
					05/07/03	11.85	701.11				
					12/03/03	12.85	700.11				
					03/10/04	13.00	699.96				
					06/02/04	12.17	700.79	700.01	699.10	701.18	2.08

Table 3a
Water Level Data Summary
Former Genuine Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Upper Sand Unit Monitoring Wells

Monitoring Well ID	TOC Elevation ⁽¹⁾ (feet amsl)	Ground Elevation ⁽¹⁾ (feet amsl)	Screen Interval (feet bgs)	Screen Depth (feet amsl)	Date Gauged	DTW (feet)	GW Elevation (feet amsl)	Average GW Elevation (feet amsl)	Minimum GW Elevation (feet amsl)	Maximum GW Elevation (feet amsl)	GW Fluctuation (feet)
MW-151	712.96	NA	5-20	707.96-692.96	07/14/95	13.93	699.03				
					09/11/95	14.04	698.92				
					02/05/97	12.80	700.16				
					11/22/99	13.97	698.99				
					02/28/00	13.94	699.02				
	712.93	713.20	5-20	707.93-692.93	11/07/00	14.15	698.78				
					06/20/01	13.98	698.95				
					07/24/01	13.88	699.05				
					01/30/02	13.80	699.13				
					07/18/02	13.46	699.47				
					12/04/03	13.85	699.08				
					03/10/04	NA	NA				
					06/02/04	13.44	699.49	699.17	698.78	700.16	1.38
MW-152	713.06	NA	5-20	708.06-698.06	07/14/95	13.45	699.61				
					09/11/95	13.57	699.49				
					02/05/97	12.21	700.85				
					02/26/97	12.92	700.14				
					11/22/99	13.90	699.16				
					02/28/00	13.38	699.68				
					11/07/00	13.84	699.09				
	712.93	713.20	5-20	707.93-697.93	06/20/01	13.64	699.29				
					07/24/01	13.54	699.39				
					01/30/02	13.46	699.47				
					07/15/02	12.89	700.04				
					12/03/03	13.31	699.62				
					03/10/04	13.30	699.63				
					06/02/04	12.79	700.14	699.69	699.09	700.85	1.76

Table 3a
Water Level Data Summary
Former Genuine Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Upper Sand Unit Monitoring Wells

Monitoring Well ID	TOC Elevation ⁽¹⁾ (feet amsl)	Ground Elevation ⁽¹⁾ (feet amsl)	Screen Interval (feet bgs)	Screen Depth (feet amsl)	Date Gauged	DTW (feet)	GW Elevation (feet amsl)	Average GW Elevation (feet amsl)	Minimum GW Elevation (feet amsl)	Maximum GW Elevation (feet amsl)	GW Fluctuation (feet)
MW-153	711.64	NA	4.5-19.5	707.14-692.14	07/14/95	11.77	699.87				
					09/11/95	11.76	699.88				
					02/05/97	9.78	701.86				
					02/26/97	11.14	700.50				
					11/22/99	12.25	699.39				
	711.67	709.30	4.5-19.5	707.67-692.67	02/28/00	11.26	700.38				
					11/07/00	12.15	699.52				
					06/21/01	11.95	699.72				
					07/24/01	11.92	699.75				
					01/30/02	11.83	699.84				
					07/22/02	11.82	699.85				
					12/03/03	12.36	699.31				
					03/10/04	11.44	700.23				
					06/02/04	11.49	700.18	700.02	699.31	701.86	2.55
MW-154	714.22	NA	5-20	709.22-699.22	07/14/95	13.31	700.91				
					09/11/95	13.42	700.80				
					02/05/97	12.17	702.05				
					02/26/97	13.07	701.15				
					11/22/99	14.11	700.11				
	714.26	711.60	5-20	709.26-699.26	02/28/00	13.38	700.84				
					11/07/00	14.02	700.24				
					06/21/01	13.79	700.47				
					07/24/01	13.77	700.49				
					01/30/02	13.88	700.38				
					07/22/02	13.37	700.89				
					12/03/03	13.57	700.69				
					03/10/04	13.41	700.85				
					06/02/04	13.44	700.82	700.76	700.11	702.05	1.94

Table 3a
Water Level Data Summary
Former Genuine Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Upper Sand Unit Monitoring Wells

Monitoring Well ID	TOC Elevation ⁽¹⁾ (feet amsl)	Ground Elevation ⁽¹⁾ (feet amsl)	Screen Interval (feet bgs)	Screen Depth (feet amsl)	Date Gauged	DTW (feet)	GW Elevation (feet amsl)	Average GW Elevation (feet amsl)	Minimum GW Elevation (feet amsl)	Maximum GW Elevation (feet amsl)	GW Fluctuation (feet)
MW-156	711.69	NA	5-20	706.69-691.69	09/11/95	12.21	699.48				
					02/05/97	10.65	701.04				
					11/22/99	12.52	699.17				
					02/28/00	12.41	699.28				
	711.72	712.00	5-20	706.72-691.72	11/07/00	12.65	699.06				
					06/20/01	12.43	699.29				
					07/24/01	12.35	699.37				
					01/30/02	12.25	699.47				
					07/18/02	11.46	700.26				
					12/04/03	11.97	699.75				
					03/10/04	11.82	699.90				
					06/02/04	11.48	700.24	699.69	699.06	701.04	1.98
MW-157	711.30	NA	5-20	706.30-691.30	02/05/97	10.71	700.59				
					02/26/97	11.14	700.16				
					11/22/99	NA	NA				
					02/28/00	12.40	698.90				
	711.27	711.50	5-20	706.27-691.27	11/07/00	12.55	698.72				
					06/21/01	12.34	698.93				
					07/24/01	12.17	699.10				
					01/30/02	12.18	699.09				
					07/19/02	11.10	700.17				
					12/04/03	11.80	699.47				
					03/10/04	11.66	699.61				
					06/02/04	12.94	698.33	699.37	698.33	700.59	2.26
MW-159	710.00	710.40	NA	NA	02/28/00	11.19	698.81 ^(B)				
					11/07/00	11.47	698.53				
					06/21/01	11.43	698.57				
					07/24/01	11.36	698.64				
					01/30/02	11.22	698.78				
					07/19/02	12.13	697.87				
					03/10/04	12.15	697.85				
					06/02/04	11.94	698.06	698.33	697.85	698.78	0.93

Table 3a
Water Level Data Summary
Former Genuine Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Upper Sand Unit Monitoring Wells

Monitoring Well ID	TOC Elevation ⁽¹⁾ (feet amsl)	Ground Elevation ⁽¹⁾ (feet amsl)	Screen Interval (feet bgs)	Screen Depth (feet amsl)	Date Gauged	DTW (feet)	GW Elevation (feet amsl)	Average GW Elevation (feet amsl)	Minimum GW Elevation (feet amsl)	Maximum GW Elevation (feet amsl)	GW Fluctuation (feet)
MW-160	701.1 ⁽²⁾	701.35 ⁽²⁾	3-13	698.10-688.10	11/07/00	2.17	698.93				
					06/21/01	1.95	699.15				
					07/24/01	2.16	698.94				
					01/30/02	1.78	699.32				
					07/17/02	2.31	698.79				
					12/04/03	2.58	698.52				
					03/10/04	2.55	698.55				
					06/04/04	2.26	698.84	698.88	698.52	699.32	0.80
MW-161	702.99 ⁽²⁾	703.38 ⁽²⁾	3-13	699.99-689.99	11/07/00	4.01	698.98				
					06/21/01	3.69	699.30				
					07/24/01	4.02	698.97				
					1/30/2002	3.58	699.41				
					07/18/02	4.17	698.82				
					12/04/03	3.10	699.89				
					03/10/04	1.07	701.92				
					06/04/04	2.83	700.16	699.68	698.82	701.92	3.10
MW-164	718.56	719.35	16-26	702.56-692.56	11/07/00	19.87	695.69				
					06/21/01	19.67	698.89				
					07/24/01	19.47	696.09				
					01/30/02	19.45	699.11				
					07/19/02	17.97	700.59				
					12/05/03	18.75	699.81				
					03/10/04	18.60	699.96				
					06/02/04	19.52	699.04	698.65	695.69	700.59	4.90
MW-165S	712.54	712.88	10-20	702.54-692.54	06/21/01	13.80	698.74				
					07/24/01	13.71	698.83				
					01/30/02	13.52	699.02				
					07/18/02	13.82	698.72				
					12/05/03	13.56	698.98				
					03/10/04	13.93	698.61				
					06/02/04	13.69	698.85	698.85	698.61	699.04	0.43

Table 3a
Water Level Data Summary
Former Genuine Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Upper Sand Unit Monitoring Wells

Monitoring Well ID	TOC Elevation ⁽¹⁾ (feet amsl)	Ground Elevation ⁽¹⁾ (feet amsl)	Screen Interval (feet bgs)	Screen Depth (feet amsl)	Date Gauged	DTW (feet)	GW Elevation (feet amsl)	Average GW Elevation (feet amsl)	Minimum GW Elevation (feet amsl)	Maximum GW Elevation (feet amsl)	GW Fluctuation (feet)
MW-166S	712.99	713.38	10-20	702.99-692.99	07/24/01	14.32	698.67				
					01/30/02	14.32	698.67				
					07/18/02	14.41	698.58				
					12/19/03	14.69	698.30				
					03/10/04	14.61	698.38				
					06/02/04	14.28	698.71	698.60	698.30	698.85	0.55
MW-167S	716.25	716.55	12-22	704.25-694.25	06/21/01	17.99	698.26				
					07/24/01	17.81	698.44				
					01/30/02	17.90	698.35				
					07/17/02	17.74	698.51				
					12/04/03	18.12	698.13				
					03/10/04	18.00	698.25				
MW-168S	715.71	716.12	12-22	703.71-693.71	06/02/04	17.71	698.54	698.40	698.13	698.71	0.58
					06/21/01	17.66	698.05				
					07/24/01	17.60	698.11				
	714.79	715.06	12-22	703.06-693.06	01/30/02	17.06	697.73				
					7/18/2002	17.39	697.4				
					03/10/04	17.43	697.36				
MW-169S	715.95	716.25	15-25	700.95-690.95	06/02/04	17.33	697.46	697.86	697.36	698.54	1.18
					01/30/02	19.75	696.20				
					07/17/02	18.91	697.04				
					12/04/03	19.72	696.23				
					03/10/04	19.47	696.48				
					06/02/04	19.56	696.39	696.82	696.20	697.46	1.26
MW-170S	717.40	717.77	17-27	700.40-690.40	01/30/02	20.45	696.95				
					07/17/02	19.35	698.05				
					03/10/04	20.19	697.21				
					06/02/04	20.76	696.64	696.87	696.23	698.05	1.82
MW-171S	711.83	712.19	12-22	699.83-689.83	01/30/02	15.29	696.54				
					07/17/02	15.02	696.81				
					03/10/04	15.14	696.69				
					06/02/04	Obstruction		696.98	696.54	698.05	1.51
MW-172S	716.23	716.58	15-25	701.58-691.58	09/04/02	20.45	695.78				
					03/10/04	19.61	696.62				
					06/02/04	19.78	696.45	696.50	695.78	696.81	1.03

Table 3a
Water Level Data Summary
Former Genuine Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Upper Sand Unit Monitoring Wells

Monitoring Well ID	TOC Elevation ⁽¹⁾ (feet amsl)	Ground Elevation ⁽¹⁾ (feet amsl)	Screen Interval (feet bgs)	Screen Depth (feet amsl)	Date Gauged	DTW (feet)	GW Elevation (feet amsl)	Average GW Elevation (feet amsl)	Minimum GW Elevation (feet amsl)	Maximum GW Elevation (feet amsl)	GW Fluctuation (feet)
MW-165D	712.34	712.78	42-47	670.34-665.34	01/30/02	13.33	699.01				
					07/18/02	13.66	698.68				
					12/05/03	13.51	698.83				
					03/10/04	13.71	698.63				
					06/02/04	13.49	698.85	697.86	695.78	699.01	3.23
MW-166D	712.76	713.04	46-51	666.76-661.76	01/30/02	14.10	698.66				
					07/18/02	14.08	698.68				
					01/06/04	13.03	699.73				
					03/10/04	14.35	698.41				
					06/02/04	14.09	698.67	698.81	698.41	699.73	1.32
MW-167D	716.25	716.60	28-33	688.25-683.25	01/30/02	17.90	698.35				
					07/17/02	17.73	698.52				
					12/04/03	18.18	698.07				
					03/10/04	18.04	698.21				
					06/02/04	17.72	698.53	698.56	698.07	699.73	1.66
MW-168D	714.71	715.09	26-31	688.71-683.71	01/30/02	17.00	697.71				
					07/18/02	17.27	697.44				
					03/10/04	Obstruction					
					06/02/04	17.28	697.43				
MW-169D	715.23	716.23	32-37	683.23-678.23	01/30/02	19.65	695.58				
					07/17/02	18.82	696.41				
					12/04/03	19.66	695.57				
					03/10/04	19.41	695.82				
					06/02/04	19.52	695.71	696.28	695.57	697.44	1.87
MW-170D	717.34	717.76	34-39	683.34-678.34	01/30/02	20.40	696.94				
					07/17/02	19.29	698.05				
					03/10/04	20.13	697.21				
					06/02/04	20.21	697.13	696.61	695.57	698.05	2.48
MW-171D	711.88	712.15	44-49	667.88-662.88	01/30/02	15.73	696.15				
					07/17/02	15.16	696.72				
					03/10/04	15.51	696.37				
					06/02/04	Obstruction		696.94	696.15	698.05	1.90
MW-172D	716.03	716.53	33-38	683.53-678.53	09/04/02	20.17	695.86				
					03/10/04	19.43	696.60				
					06/02/04	19.61	696.42	696.46	695.86	697.13	1.27

Table 3a - Upper Sand Unit Water Level Data
Page 10 of 11

Table 3a
Water Level Data Summary
Former Genuine Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Upper Sand Unit Monitoring Wells

Monitoring Well ID	TOC Elevation ⁽¹⁾ (feet amsl)	Ground Elevation ⁽¹⁾ (feet amsl)	Screen Interval (feet bgs)	Screen Depth (feet amsl)	Date Gauged	DTW (feet)	GW Elevation (feet amsl)	Average GW Elevation (feet amsl)	Minimum GW Elevation (feet amsl)	Maximum GW Elevation (feet amsl)	GW Fluctuation (feet)
MW-301	712.75	NA	45-50	667.75-662.75	02/05/97	11.75	701.00				
					11/22/99	13.77	698.98				
					02/28/00	13.50	699.25				
	712.75	713.20	45-50	667.75-662.75	11/07/00	13.76	698.99				
					06/20/01	13.57	699.18				
					07/24/01	13.59	699.16				
					01/30/02	13.31	699.44				
					07/18/02	12.78	699.97				
					03/10/04	13.74	699.01				
					06/02/04	13.11	699.64	699.33	698.99	699.97	0.98
Average GW Elevation - Upper Sand Unit:								698.90			
Minimum GW Elevation - Upper Sand Unit:									695.57		
Maximum GW Elevation - Upper Sand Unit:										702.75	
Average GW Fluctuation - Upper Sand Unit:											1.81
Historic GW Elevation Range - Upper Sand Unit:											7.18

Table 3b
Water Level Data Summary
Former Genuine Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Lower Silty Clay Unit Monitoring Wells

Monitoring Well ID	TOC Elevation ⁽¹⁾ (feet amsl)	Ground Elevation ⁽¹⁾ (feet amsl)	Screen Interval (feet bgs)	Screen Depth (feet amsl)	Date Gauged	DTW (feet)	GW Elevation (feet amsl)	Average GW Elevation (feet amsl)	Minimum GW Elevation (feet amsl)	Maximum GW Elevation (feet amsl)	GW Fluctuation (feet)
MW-202	711.88	NA	33-35	678.88-676.88	07/14/95	22.78	689.10				
					09/11/95	12.33	699.55				
					02/05/97	11.20	700.68				
					02/26/97	12.29	699.59				
					11/22/99	12.07	699.81				
	711.86	709.30	33-35	678.86-676.86	02/28/00	11.96	699.92				
					11/07/00	12.68	699.18				
					06/21/01	12.46	699.40				
					07/24/01	12.36	699.50				
					01/30/02	12.39	699.47				
				07/22/02	12.28	699.58	699.67	699.18	700.68	1.50	
MW-302	711.54	NA	45-55	666.54-656.54	02/05/97	11.26	700.28				
					02/26/97	12.33	699.21				
					11/22/99	13.26	698.28				
					02/28/00	12.70	698.84				
	711.60	709.60	45-55	666.60-656.60	11/07/00	13.00	698.60				
					06/21/01	12.99	698.61				
					07/24/01	12.82	698.78				
					01/30/02	12.61	698.99				
					07/22/02	12.90	698.7				
					03/10/04	12.93	698.67				
				06/02/04	12.68	698.92	698.90	698.28	700.28	2.00	
Average GW Elevation - Lower Silty Clay Unit								699.28			
Minimum GW Elevation - Lower Silty Clay Unit									698.28		
Maximum GW Elevation - Lower Silty Clay Unit										700.68	
Average GW Fluctuation - Lower Silty Clay Unit											1.75
Historic GW Elevation Range - Lower Silty Clay Unit											2.40

NA Information is not available

⁽¹⁾For wells surveyed more than once, subsequent survey information is listed with the first gauging event following the survey.

⁽²⁾Top of Casing elevation not available. Water depth calculated from ground elevation.

⁽³⁾Survey Data from 11-7-00 was used to calculate the groundwater elevation

⁽⁴⁾Survey data from 3-6-02 was used to calculate all groundwater and screen elevations

⁽⁵⁾Elevation of three foot mark on stream gauge, surveyed 3-6-02

BGS - below ground surface

DTW - depth to water

GW - groundwater

SW - surface water

TOC - top of well casing

Table 3c
Water Level Data Summary
Former Genuine Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Little Eagle Creek Stream Gauge

Monitoring Well ID	Gauge Elevation ⁽¹⁾ (feet amsl)	Ground Elevation ⁽¹⁾ (feet amsl)	Screen Interval (feet bgs)	Screen Depth (feet amsl)	Date	Reading (feet)	SW Elevation (feet amsl)	Average GW Elevation (feet amsl)	Minimum GW Elevation (feet amsl)	Maximum GW Elevation (feet amsl)	GW Fluctuation (feet)
Holt	702.23 ⁽⁵⁾	NA	NA	NA	11/22/99	NA	702.25				
					02/28/00	NA	NA				
					11/07/00	NA	NA				
					06/21/01	NA	NA				
					07/24/01	2.95	699.28				
					01/30/02	0.30	701.93	701.15	699.28	702.25	2.97
Olin	701.43 ⁽⁵⁾	NA	NA	NA	11/22/99	NA	701.39				
					02/28/00	NA	NA				
					11/07/00	NA	NA				
					06/21/01	NA	NA				
					07/24/01	2.74	698.69				
					01/30/02	0.65	700.78	700.29	698.69	701.39	2.70
Average SW Elevation:								700.72			
Minimum SW Elevation:									698.69		
Maximum SW Elevation:										702.25	
SW Fluctuation:											3.56

NA Information is not available

⁽¹⁾For wells surveyed more than once, subsequent survey information is listed with the first gauging event following the survey.

⁽²⁾Top of Casing elevation not available. Water depth calculated from ground elevation.

⁽³⁾Survey Data from 11-7-00 was used to calculate the groundwater elevation

⁽⁴⁾Survey data from 3-6-02 was used to calculate all groundwater and screen elevations

⁽⁵⁾Elevation of three foot mark on stream gauge, surveyed 3-6-02

BGS - below ground surface

DTW - depth to water

GW - groundwater

SW - surface water

TOC - top of well casing

Table 4
Calculated Vertical Hydraulic Gradients
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Date	Well ID	Top of Screen Elevation (ft)	Bottom of Screen Elevation (ft)	Mid-screen Elevation (ft)	Groundwater Elevation (ft)	Mid-screen Distance (ft)	Groundwater Elevation Difference (ft)	Vertical Gradient
2/5/1997	MW-150	708.93	693.93	701.43	701.18	35.90	-0.11	-0.0031
	MW-200	668.03	663.03	665.53	701.07			
11/22/1999	MW-150	708.93	693.93	701.43	699.36	35.90	-0.20	-0.0056
	MW-200	668.03	663.03	665.53	699.16			
2/28/2000	MW-150	708.93	693.93	701.43	699.43	35.90	0.07	0.0019
	MW-200	668.03	663.03	665.53	699.50			
11/7/2000	MW-150	708.90	693.90	701.40	699.10	35.90	-0.05	-0.0014
	MW-200	668.00	663.00	665.50	699.05			
6/20/2001	MW-150	708.90	693.90	701.40	699.39	35.90	-0.10	-0.0028
	MW-200	668.00	663.00	665.50	699.29			
7/24/2001	MW-150	708.96	693.96	701.46	700.08	35.90	-0.65	-0.0181
	MW-200	668.06	663.06	665.56	699.43			
1/30/2002	MW-150	708.96	693.96	701.46	699.20	35.90	0.38	0.0106
	MW-200	668.06	663.06	665.56	699.58			
7/19/2002	MW-150	708.96	693.96	701.46	700.78	35.90	-0.41	-0.0114
	MW-200	668.06	663.06	665.56	700.37			
7/14/1995	MW-151	707.96	692.96	700.46	699.03	25.17	0.11	0.0044
	MW-201	676.29	674.29	675.29	699.14			
9/11/1995	MW-151	707.96	692.96	700.46	698.92	25.17	0.38	0.0151
	MW-201	676.29	674.29	675.29	699.30			
2/5/1997	MW-151	707.96	692.96	700.46	700.16	25.17	0.48	0.0191
	MW-201	676.29	674.29	675.29	700.64			
11/22/1999	MW-151	707.96	692.96	700.46	698.99	25.17	1.17	0.0465
	MW-201	676.29	674.29	675.29	700.16			
2/28/2000	MW-151	707.96	692.96	700.46	699.02	25.17	0.13	0.0052
	MW-201	676.29	674.29	675.29	699.15			
11/7/2000	MW-151	707.93	692.93	700.43	698.78	25.18	0.39	0.0155
	MW-201	676.25	674.25	675.25	699.17			
6/20/2001	MW-151	707.93	692.93	700.43	698.95	25.18	0.36	0.0143
	MW-201	676.25	674.25	675.25	699.31			
7/24/2001	MW-151	707.93	692.93	700.43	699.05	25.18	-0.92	-0.0365
	MW-201	676.25	674.25	675.25	698.13			
1/30/2002	MW-151	707.93	692.93	700.43	699.13	25.18	1.04	0.0413
	MW-201	676.25	674.25	675.25	700.17			
7/18/2002	MW-151	707.93	692.93	700.43	699.47	25.18	0.16	0.0064
	MW-201	676.25	674.25	675.25	699.63			
2/5/1997	MW-151	707.96	692.96	700.46	700.16	35.21	0.84	0.0239
	MW-301	667.75	662.75	665.25	701.00			
11/22/1999	MW-151	707.96	692.96	700.46	698.99	35.21	-0.01	-0.0003
	MW-301	667.75	662.75	665.25	698.98			
2/28/2000	MW-151	707.96	692.96	700.46	699.02	35.21	0.23	0.0065
	MW-301	667.75	662.75	665.25	699.25			
11/7/2000	MW-151	707.93	692.93	700.43	698.78	35.18	0.21	0.0060
	MW-301	667.75	662.75	665.25	698.99			
6/20/2001	MW-151	707.93	692.93	700.43	698.95	35.18	0.23	0.0065
	MW-301	667.75	662.75	665.25	699.18			
7/24/2001	MW-151	707.93	692.93	700.43	699.05	35.18	0.11	0.0031
	MW-301	667.75	662.75	665.25	699.16			
1/30/2002	MW-151	707.93	692.93	700.43	699.13	35.18	0.31	0.0088
	MW-301	667.75	662.75	665.25	699.44			
7/1/2002	MW-151	707.93	692.93	700.43	699.47	35.18	0.50	0.0142
	MW-301	667.75	662.75	665.25	699.97			
2/5/1997	MW-201	676.29	674.29	675.29	700.64	10.04	0.36	0.0359
	MW-301	667.75	662.75	665.25	701.00			
11/22/1999	MW-201	676.29	674.29	675.29	700.16	10.04	-1.18	-0.1175
	MW-301	667.75	662.75	665.25	698.98			
2/28/2000	MW-201	676.29	674.29	675.29	699.15	10.04	0.10	0.0100
	MW-301	667.75	662.75	665.25	699.25			
11/7/2000	MW-201	676.25	674.25	675.25	699.17	10.00	-0.18	-0.0180
	MW-301	667.75	662.75	665.25	698.99			
6/20/2001	MW-201	676.25	674.25	675.25	699.31	10.00	-0.13	-0.0130
	MW-301	667.75	662.75	665.25	699.18			
7/24/2001	MW-201	676.25	674.25	675.25	698.13	10.00	1.03	0.1030
	MW-301	667.75	662.75	665.25	699.16			
1/30/2002	MW-201	676.25	674.25	675.25	700.17	10.00	-0.73	-0.0730
	MW-301	667.75	662.75	665.25	699.44			
7/18/2002	MW-201	676.25	674.25	675.25	699.63	10.00	0.34	0.0340
	MW-301	667.75	662.75	665.25	699.97			
7/14/1995	MW-153	707.14	692.14	699.64	699.87	21.76	-10.77	-0.4949
	MW-202	678.88	676.88	677.88	689.10			
9/11/1995	MW-153	707.14	692.14	699.64	699.88	21.76	-0.33	-0.0152
	MW-202	678.88	676.88	677.88	699.55			
2/5/1997	MW-153	707.14	692.14	699.64	701.86	21.76	-1.18	-0.0542
	MW-202	678.88	676.88	677.88	700.68			

Table 4
Calculated Vertical Hydraulic Gradients
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Date	Well ID	Top of Screen Elevation (ft)	Bottom of Screen Elevation (ft)	Mid-screen Elevation (ft)	Groundwater Elevation (ft)	Mid-screen Distance (ft)	Groundwater Elevation Difference (ft)	Vertical Gradient
2/26/1997	MW-153	707.14	692.14	699.64	700.50	21.76	-0.91	-0.0418
	MW-202	678.88	676.88	677.88	699.59			
11/22/1999	MW-153	707.14	692.14	699.64	699.39	21.76	0.42	0.0193
	MW-202	678.88	676.88	677.88	699.81			
2/28/2000	MW-153	707.14	692.14	699.64	700.38	21.76	-0.46	-0.0211
	MW-202	678.88	676.88	677.88	699.92			
11/7/2000	MW-153	707.67	692.67	700.17	699.52	22.31	-0.34	-0.0152
	MW-202	678.86	676.86	677.86	699.18			
6/21/2000	MW-153	707.67	692.67	700.17	699.72	22.31	-0.32	-0.0143
	MW-202	678.86	676.86	677.86	699.40			
7/24/2001	MW-153	707.67	692.67	700.17	699.75	22.31	-0.25	-0.0112
	MW-202	678.86	676.86	677.86	699.50			
1/30/2002	MW-153	707.67	692.67	700.17	699.84	22.31	-0.37	-0.0166
	MW-202	678.86	676.86	677.86	699.47			
7/22/2002	MW-153	707.67	692.67	700.17	699.85	22.31	-0.27	-0.0121
	MW-202	678.86	676.86	677.86	699.58			
2/5/1997	MW-153	707.14	692.14	699.64	701.86	38.10	-1.58	-0.0415
	MW-302	666.54	656.54	661.54	700.28			
2/26/1997	MW-153	707.14	692.14	699.64	700.50	38.10	-1.29	-0.0339
	MW-302	666.54	656.54	661.54	699.21			
11/22/1999	MW-153	707.14	692.14	699.64	699.39	38.10	-1.11	-0.0291
	MW-302	666.54	656.54	661.54	698.28			
2/28/2000	MW-153	707.14	692.14	699.64	700.38	38.10	-1.54	-0.0404
	MW-302	666.54	656.54	661.54	698.84			
11/7/2000	MW-153	707.67	692.67	700.17	699.52	38.57	-0.92	-0.0239
	MW-302	666.60	656.60	661.60	698.60			
6/21/2000	MW-153	707.67	692.67	700.17	699.72	38.57	-1.11	-0.0288
	MW-302	666.60	656.60	661.60	698.61			
7/24/2001	MW-153	707.67	692.67	700.17	699.75	38.57	-0.97	-0.0251
	MW-302	666.60	656.60	661.60	698.78			
1/30/2002	MW-153	707.67	692.67	700.17	699.84	38.57	-0.85	-0.0220
	MW-302	666.60	656.60	661.60	698.99			
7/22/2002	MW-153	707.67	692.67	700.17	699.85	38.57	-1.15	-0.0298
	MW-302	666.60	656.60	661.60	698.70			
2/5/1997	MW-202	678.88	676.88	677.88	700.68	16.34	-0.40	-0.0245
	MW-302	666.54	656.54	661.54	700.28			
2/26/1997	MW-202	678.88	676.88	677.88	699.59	16.34	-0.38	-0.0233
	MW-302	666.54	656.54	661.54	699.21			
11/22/1999	MW-202	678.88	676.88	677.88	699.81	16.34	-1.53	-0.0936
	MW-302	666.54	656.54	661.54	698.28			
2/28/2000	MW-202	678.88	676.88	677.88	699.92	16.34	-1.08	-0.0661
	MW-302	666.54	656.54	661.54	698.84			
11/7/2000	MW-202	678.86	676.86	677.86	699.18	16.26	-0.58	-0.0357
	MW-302	666.60	656.60	661.60	698.60			
6/21/2000	MW-202	678.86	676.86	677.86	699.40	16.26	-0.79	-0.0486
	MW-302	666.60	656.60	661.60	698.61			
7/24/2001	MW-202	678.86	676.86	677.86	699.50	16.26	-0.72	-0.0443
	MW-302	666.60	656.60	661.60	698.78			
1/30/2002	MW-202	678.86	676.86	677.86	699.47	16.26	-0.48	-0.0295
	MW-302	666.60	656.60	661.60	698.99			
7/22/2002	MW-202	678.86	676.86	677.86	699.58	16.26	0.88	-0.0541
	MW-302	666.60	656.60	661.60	698.70			
1/30/2002	MW-165S	702.54	692.54	697.54	699.02	29.70	-0.01	-0.0003
	MW-165D	670.34	665.34	667.84	699.01			
7/18/2002	MW-165S	702.54	692.54	697.54	698.72	29.70	-0.04	-0.0013
	MW-165D	670.34	665.34	667.84	698.68			
1/30/2002	MW-166S	702.99	692.99	697.99	698.67	33.73	-0.01	-0.0003
	MW-166D	666.76	661.76	664.26	698.66			
7/18/2002	MW-166S	702.99	692.99	697.99	698.58	33.73	0.10	0.0030
	MW-166D	666.76	661.76	664.26	698.68			
1/30/2002	MW-167S	704.25	694.25	699.25	698.35	13.50	0.00	0.0000
	MW-167D	688.25	683.25	685.75	698.35			
7/17/2002	MW-167S	704.25	694.25	699.25	698.52	13.50	-1.12	-0.0830
	MW-167D	688.25	683.25	685.75	697.40			
1/30/2002	MW-168S	703.06	693.06	698.06	697.73	11.85	-0.02	-0.0017
	MW-168D	688.71	683.71	686.21	697.71			
7/18/2002	MW-168S	703.06	693.06	698.06	697.40	11.85	0.04	0.0034
	MW-168D	688.71	683.71	686.21	697.44			
1/30/2002	MW-169S	700.95	690.95	695.95	696.20	15.22	-0.62	-0.0407
	MW-169D	683.23	678.23	680.73	695.58			

Table 4
Calculated Vertical Hydraulic Gradients
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Date	Well ID	Top of Screen Elevation (ft)	Bottom of Screen Elevation (ft)	Mid-screen Elevation (ft)	Groundwater Elevation (ft)	Mid-screen Distance (ft)	Groundwater Elevation Difference (ft)	Vertical Gradient
7/17/2002	MW-169S	700.95	690.95	695.95	697.04	15.22	-0.63	-0.0414
	MW-169D	683.23	678.23	680.73	696.41			
1/30/2002	MW-170S	700.40	690.40	695.40	696.95	14.56	-0.01	-0.0007
	MW-170D	683.34	678.34	680.84	696.94			
7/17/2002	MW-170S	700.40	690.40	695.40	698.05	14.56	0.00	0.0000
	MW-170D	683.34	678.34	680.84	698.05			
1/30/2002	MW-171S	699.83	689.83	694.83	696.54	29.45	-0.39	-0.0132
	MW-171D	667.88	662.88	665.38	696.15			
7/17/2002	MW-171S	699.83	689.83	694.83	696.81	29.45	-0.09	-0.0031
	MW-171D	667.88	662.88	665.38	696.72			
9/4/2002	MW-172S	701.58	691.58	696.58	695.78	15.55	0.08	0.0051
	MW-172D	683.53	678.53	681.03	695.86			

Table 5
 Calculated Horizontal Hydraulic Gradients
 Former Genuine Motors Corporation
 Allison Gas Turbine Division, Plant 10
 Indianapolis, Indiana
 IDEM VRP #6991004
 KERAMIDA Project No. 2829E

Gauging Date	Well Type	Contour Interval	Groundwater Elevation Difference (ft)	Horizontal Distance Between Contour Lines (ft)	Horizontal Gradient
February 28, 2000	Shallow	699-701	2.00	76.90	0.0260
		699-701	2.00	500.00	0.0040
November 7, 2000	Shallow	699-700	1.00	153.85	0.0065
		699-700	1.00	884.61	0.0011
June 21, 2001	Shallow	698-700	2.00	1038.46	0.0019
		698-700	2.00	1192.31	0.0017
July 24, 2001	Shallow	699-701	2.00	153.85	0.0130
		699-701	2.00	280.77	0.0071
January 30, 2002	Shallow	697-700	3.00	1069.23	0.0028
		697-700	3.00	1392.31	0.0022
July 15-22, 2002	Shallow	697-700	3.00	653.85	0.0046
		697-700	3.00	2307.69	0.0013
Average:					0.0060
January 30, 2002	Deep	696-699	3.00	1169.23	0.0026
		696-699	3.00	1207.69	0.0025
July 15-22, 2002	Deep	697-701	4.00	1192.31	0.0034
		697-701	4.00	1823.07	0.0022
Average:					0.0026

Table 6a
Surface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Acetone	Acrolein	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane (Methyl Bromide)	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride
KB-113	5/16/2001	0-2	293160	<0.120	<0.300	<0.300	<0.0060	<0.0050	<0.0060	<0.0060	<0.0060	<0.012	<0.0060	<0.0060	<0.0060	<0.0060	<0.0050
KB-114	5/18/2001	0-2	293308	<0.120	<0.300	<0.300	<0.0061	<0.0051	<0.0061	<0.0061	<0.0061	<0.012	<0.0061	<0.0061	<0.0061	<0.0061	<0.0051
KB-115	5/16/2001	0-2	293163	<0.110	<0.260	<0.260	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053
KB-116	5/16/2001	1.5-2	293168	<0.110	<0.280	<0.280	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056
KB-117 Dup	5/18/2001	0-2	293303	<0.110	<0.280	<0.280	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056
KB-118	5/18/2001	0-2	293305	<0.110	<0.270	<0.270	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053
KB-118 Dup	5/18/2001	0-2	293306	<0.110	<0.270	<0.270	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054
KB-119	5/18/2001	0-2	293307	<0.120	<0.290	<0.290	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.012	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059
Tier II Residential Cleanup Goals Surface Soil ⁽¹⁾				1,000	NA	NA	22.07	NA	NA	10.3 ⁽²⁾	NA	NA	1,000 ⁽²⁾	1,000 ⁽²⁾	1,000 ⁽²⁾	1,000 ⁽²⁾	NA
Tier II Non-Residential Cleanup Goals Surface Soil ⁽¹⁾				1,000	NA	NA	16.63	NA	NA	101 ⁽²⁾	NA	NA	1,000 ⁽²⁾	1,000 ⁽²⁾	1,000 ⁽²⁾	1,000 ⁽²⁾	NA

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds

Samples analyzed using EPA SW-846 Method 8260

mg/kg = milligrams per kilogram

NA = Not Applicable

*cis-1,2-Dichloroethylene and trans-1,2-Dichloroethylene results are combined

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human

Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

⁽³⁾ Source: EPA Region 3 Risk-Based Concentration Table - October 1998 Update.

Table 6a
Surface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane (Methyl Chloride)	2-Chlorotoluene	4-Chlorotoluene	2-Chloroethyl vinyl ether	1,2-Dibromo-3-Chloropropane	1,2-Dibromomethane	(Methylene Bromide)	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane
KB-113	5/16/2001	0-2	293160	<0.0060	<0.0060	<0.012	<0.024	<0.012	<0.0060	<0.0060	<0.060	<0.012	<0.0060	<0.012	<0.0060	<0.0060	<0.0060	<0.012
KB-114	5/18/2001	0-2	293308	<0.0061	<0.0061	<0.012	<0.024	<0.012	<0.0061	<0.0061	<0.061	<0.012	<0.0061	<0.012	<0.0061	<0.0061	<0.0061	<0.012
KB-115	5/16/2001	0-2	293163	<0.0053	<0.0053	<0.011	<0.021	<0.011	<0.0053	<0.0053	<0.053	<0.011	<0.0053	<0.011	<0.0053	<0.0053	<0.0053	<0.011
KB-116	5/16/2001	1.5-2	293168	<0.0056	<0.0056	<0.011	<0.022	<0.011	<0.0056	<0.0056	<0.056	<0.011	<0.0056	<0.011	<0.0056	<0.0056	<0.0056	<0.011
KB-117	5/18/2001	0-2	293303	<0.0056	<0.0056	<0.011	<0.022	<0.011	<0.0056	<0.0056	<0.056	<0.011	<0.0056	<0.011	<0.0056	<0.0056	<0.0056	<0.011
KB-117 Dup	5/18/2001	0-2	293304	<0.0056	<0.0056	<0.011	<0.022	<0.011	<0.0056	<0.0056	<0.056	<0.011	<0.0056	<0.011	<0.0056	<0.0056	<0.0056	<0.011
KB-118	5/18/2001	0-2	293305	<0.0053	<0.0053	<0.011	<0.021	<0.011	<0.0053	<0.0053	<0.053	<0.011	<0.0053	<0.011	<0.0053	<0.0053	<0.0053	<0.011
KB-118 Dup	5/18/2001	0-2	293306	<0.0054	<0.0054	<0.010	<0.021	<0.010	<0.0054	<0.0054	<0.054	<0.011	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.011
KB-119	5/18/2001	0-2	293307	<0.0059	<0.0059	<0.012	<0.024	<0.012	<0.0059	<0.0059	<0.059	<0.012	<0.0059	<0.012	<0.0059	<0.0059	<0.0059	<0.012
Tier II Residential Cleanup Goals Surface Soil ⁽¹⁾				1,000 ⁽²⁾	NA	NA	104.92	NA	NA	NA	NA	NA	NA	NA	10,000	NA	26.67	NA
Tier II Non-Residential Cleanup Goals Surface Soil ⁽¹⁾				1,000 ⁽²⁾	NA	1,000	5.28	NA	NA	NA	NA	NA	NA	NA	10,000	NA	2,416.67	NA

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds

Samples analyzed using EPA SW-846 Method 8260

mg/kg = milligrams per kilogram

NA = Not Applicable

*cis-1,2-Dichloroethylene and trans-1,2-Dichloroethylene results are combined

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human

Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

⁽³⁾ Source: EPA Region 3 Risk-Based Concentration Table - October 1998 Update.

Table 6a
Surface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	trans-1,4-Dichloro-2-butene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethylene	cis-1,2-Dichloroethylene	trans-1,2-Dichloroethene	1,2-Dichloropropane	1,3-Dichloropropane	2,2-Dichloropropane	1,1-Dichloropropene	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethylbenzene	Ethyl methacrylate	2-Hexanone
KB-113	5/16/2001	0-2	293160	<0.060	<0.0060	<0.0061	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.012	<0.060
KB-114	5/18/2001	0-2	293308	<0.061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.012	<0.061
KB-115	5/16/2001	0-2	293163	<0.053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.053
KB-116	5/16/2001	1.5-2	293168	<0.056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.056
KB-117	5/18/2001	0-2	293303	<0.056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.056
KB-117 Dup	5/18/2001	0-2	293304	<0.056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.056
KB-118	5/18/2001	0-2	293305	<0.053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.053
KB-118 Dup	5/18/2001	0-2	293306	<0.054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.054
KB-119	5/18/2001	0-2	293307	<0.059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.012	<0.059
Tier II Residential Cleanup Goals Surface Soil ⁽¹⁾				NA	1,000	7.03	1.07	1,000	1,000 ⁽²⁾	NA	NA	NA	1,000 ⁽²⁾	NA	NA	1,000	NA	NA
Tier II Non-Residential Cleanup Goals Surface Soil ⁽¹⁾				NA	973.47	5.27	0.15	1,000	1,000 ⁽²⁾	NA	NA	NA	1,000 ⁽²⁾	NA	NA	1,000	NA	NA

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds

Samples analyzed using EPA SW-846 Method 8260

mg/kg = milligrams per kilogram

NA = Not Applicable

*cis-1,2-Dichloroethylene and trans-1,2-Dichloroethylene results are combined

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human

Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

⁽³⁾ Source: EPA Region 3 Risk-Based Concentration Table - October 1998 Update.

Table 6a
Surface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Hexachlorobutadiene	Iodomethane	Isopropylbenzene	p-Isopropyltoluene	Methylene chloride	Methyl Ethyl Ketone	Methyl(tert) butyl ether (MTBE)	4-Methyl-2-pentanone (MIBK)	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethylene	Toluene
KB-113	5/16/2001	0-2	293160	<0.0060	<0.012	<0.0060	<0.0060	<0.030	<0.060	<0.012	<0.050	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
KB-114	5/18/2001	0-2	293308	<0.0061	<0.012	<0.0061	<0.0061	0.037	<0.061	<0.012	<0.051	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061
KB-115	5/16/2001	0-2	293163	<0.0053	<0.011	<0.0053	<0.0053	<0.026	<0.053	<0.011	<0.053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053
KB-116	5/16/2001	1.5-2	293168	<0.0056	<0.011	<0.0056	<0.0056	<0.028	<0.056	<0.011	<0.056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056
KB-117	5/18/2001	0-2	293303	<0.0056	<0.011	<0.0056	<0.0056	0.036	<0.056	<0.011	<0.056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	0.016	<0.0056
KB-117 Dup	5/18/2001	0-2	293304	<0.0056	<0.011	<0.0056	<0.0056	0.034	<0.056	<0.011	<0.056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	0.02	<0.0056
KB-118	5/18/2001	0-2	293305	<0.0053	<0.011	<0.0053	<0.0053	0.034	<0.053	<0.011	<0.053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053
KB-118 Dup	5/18/2001	0-2	293306	<0.0054	<0.011	<0.0054	<0.0054	0.027	<0.054	<0.011	<0.054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054
KB-119	5/18/2001	0-2	293307	<0.0059	<0.012	<0.0059	<0.0059	<0.029	<0.059	<0.012	<0.059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059
Tier II Residential Cleanup Goals Surface Soil ⁽¹⁾				8.21	NA	1,000 ⁽²⁾	1,000 ⁽²⁾	85.3 ⁽³⁾	1,000	0.35	1,000	10,000	1,000 ⁽²⁾	NA	24.62	3.20	12.56	1,000
Tier II Non-Residential Cleanup Goals Surface Soil ⁽¹⁾				1.78	NA	647 ⁽²⁾	1,000 ⁽²⁾	816 ⁽²⁾	1,000	5.6	1,000	10,000	1,000 ⁽²⁾	410,000 ⁽³⁾	75.91	75.41	101.23	1,000

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds

Samples analyzed using EPA SW-846 Method 8260

mg/kg = milligrams per kilogram

NA = Not Applicable

*cis-1,2-Dichloroethylene and trans-1,2-Dichloroethylene results are combined

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human

Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

⁽³⁾ Source: EPA Region 3 Risk-Based Concentration Table - October 1998 Update.

Table 6a
Surface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethylene	Trichlorofluoromethane	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	Vinyl chloride	Xylenes, Total
KB-113	5/16/2001	0-2	293160	<0.0060	<0.0060	<0.0060	<0.0050	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.012	<0.012	<0.0060
KB-114	5/18/2001	0-2	293308	<0.0061	<0.0061	<0.0061	<0.0051	<0.0061	<0.0051	<0.0061	<0.0061	<0.0061	<0.012	<0.012	<0.0061
KB-115	5/16/2001	0-2	293163	<0.0053	<0.0053	<0.0053	<0.0053	0.023	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.011	<0.0053
KB-116	5/16/2001	1.5-2	293168	<0.0056	<0.0056	<0.0056	<0.0056	0.11	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.011	<0.0056
KB-117	5/18/2001	0-2	293303	<0.0056	<0.0056	<0.0056	<0.0056	0.27	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.011	<0.0056
KB-117 Dup	5/18/2001	0-2	293304	<0.0056	<0.0056	<0.0056	<0.0056	0.49	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.011	<0.0056
KB-118	5/18/2001	0-2	293305	<0.0053	<0.0053	<0.0053	<0.0053	0.11	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.011	<0.0053
KB-118 Dup	5/18/2001	0-2	293306	<0.0054	<0.0054	<0.0054	<0.0054	0.13	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.011	<0.0054
KB-119	5/18/2001	0-2	293307	<0.0059	<0.0059	<0.0059	<0.0059	0.034	<0.0059	<0.0059	<0.0059	<0.0059	<0.012	<0.012	<0.0059
Tier II Residential Cleanup Goals Surface Soil ⁽¹⁾				NA	2,700	1,000	11.23	58.18	1,000 ⁽²⁾	NA	1,000 ⁽²⁾	1,000 ⁽²⁾	NA	0.034	1,000
Tier II Non-Residential Cleanup Goals Surface Soil ⁽¹⁾				NA	10,000	1,000	22.74	24.97	1,000 ⁽²⁾	NA	1,000 ⁽²⁾	435 ⁽²⁾	NA	0.02	1,000

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds

Samples analyzed using EPA SW-846 Method 8260

mg/kg = milligrams per kilogram

NA = Not Applicable

*cis-1,2-Dichloroethylene and trans-1,2-Dichloroethene results are combined

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human

Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations

⁽³⁾ Source: EPA Region 3 Risk-Based Concentration Table - October 1998 Update.

Table 6b
Surface Soil Analytical Results for PAHs (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (ghi) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (ah) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
KB-28	5/15/2001	0-2	293129	<0.35	<0.35	<0.35	1.7	1.8	3.4	<0.35	1	1.9	<0.35	3.3	<0.35	0.89	<0.35	1.3	3.1
KB-29	5/15/2001	0-2	293131	<0.39	<0.39	0.62	1.3	1.1	1.8	<0.39	0.65	1.4	<0.39	2.8	<0.39	0.59	<0.39	2.1	2.6
KB-29 Dup.	5/15/2001	0-2	293132	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
KB-30	5/15/2001	0-2	293135	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
KB-31	5/15/2001	0-2	293137	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
KB-32	5/15/2001	0-2	293139	<0.39	<0.39	<0.39	1.5	1.6	2.8	<0.39	0.88	1.6	<0.39	2.7	<0.39	0.72	<0.39	1.1	2.4
KB-33	5/15/2001	0-2	293144	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
KB-34	5/16/2001	0-2	293147	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
KB-35	5/16/2001	0-2	293149	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
KB-36	5/16/2001	0-2	293152	<0.38	<0.38	<0.38	<0.38	0.61	0.8	0.41	0.49	0.43	<0.38	0.43	<0.38	<0.38	<0.38	<0.38	0.57
KB-37	5/16/2001	0-2	293155	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
KB-38	5/16/2001	0-2	293157	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
KB-413	5/16/2001	0-2	293160	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
KB-414	5/18/2001	0-2	293308	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
KB-415	5/16/2001	0-2	293163	<0.35	0.41	<0.35	0.41	0.94	1.9	<0.35	0.87	0.6	<0.35	0.49	<0.35	0.45	<0.35	<0.35	0.59
KB-416	5/16/2001	1.5-2	293168	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
KB-417	5/18/2001	0-2	293303	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
KB-417 Dup.	5/18/2001	0-2	293304	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
KB-418	5/18/2001	0-2	293305	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
KB-418 Dup.	5/18/2001	0-2	293306	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
KB-419	5/18/2001	0-2	293307	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
Tier II Residential Cleanup Goals Surface Soil ⁽¹⁾				10,000	5,400 ⁽²⁾	10,000	0.88	0.66	0.88	1,620 ⁽²⁾	8.77	87.67	0.66	2,160	10,000	0.88	10,000	250 ⁽³⁾	8,100
Tier II Non-Residential Cleanup Goals Surface Soil ⁽¹⁾				10,000	4,570 ⁽²⁾	10,000	79.45	7.94	79.45	10,000 ⁽²⁾	794.52	7,945.21	7.95	10,000	10,000	79.45	10,000	250 ⁽³⁾	10,000

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal
Detected compound exceeds the VRP Tier II Residential Cleanup Goal
Detected compound is below the VRP Tier II Residential Cleanup Goal

PAHs = Polynuclear Aromatic Hydrocarbons

Samples analyzed using EPA SW-846 Method 8310

mg/kg = micrograms per kilogram

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F: Tier II Cleanup Goals-Human

Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

⁽³⁾ Tier I Health Protective Levels for Phenanthrene, Iodomethane and Acrocin

Technical Memo by Indiana Voluntary Remediation Program, Dated 4/2/198.

Table 6c
Surface Soil Analytical Results for Metals (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Total Antimony	Total Arsenic	Total Barium	Total Beryllium	Total Cadmium	Total Chromium	Total Copper	Total Lead	Total Mercury	Total Nickel	Total Selenium	Total Silver	Total Thallium	Total Zinc
GP-1	12/19/1996	0-2	W6120376-01	<20	<40	NA	<0.50	<2.0	5.5	9	21	<0.25	7.7	<20	<2.0	<20	59
GP-2	12/19/1996	0-2	W6120376-03	<20	<40	NA	<0.50	<2.0	1,600	510	940	<0.25	24	<20	<2.0	<20	880
GP-3	12/19/1996	0-2	W6120376-05	<20	<40	NA	0.61	<2.0	16	21	9	<0.25	21	<20	<2.0	<20	60
GP-4	12/19/1996	0-2	W6120376-07	<20	<40	NA	<0.50	<2.0	10	12	10	<0.25	11	<20	<2.0	<20	42
GP-5	12/19/1996	0-2	W6120376-09	<20	<40	NA	<0.50	<2.0	9.7	7.4	13	<0.25	8.5	<20	<2.0	<20	36
GP-6	12/19/1996	0-2	W6120376-11	<20	<40	NA	<0.50	<2.0	17	14	8.6	<0.25	17	<20	<2.0	<20	37
KB-28	5/15/2001	0-2	293129	NA	NA	NA	NA	<0.54	8.3	NA	29	NA	NA	NA	NA	NA	NA
KB-29	5/15/2001	0-2	293131	NA	NA	NA	NA	<0.59	13	NA	8.6	NA	NA	NA	NA	NA	NA
KB-29 Dup.	5/15/2001	0-2	293132	NA	NA	NA	NA	<0.60	17	NA	<4.8	NA	NA	NA	NA	NA	NA
KB-30	5/15/2001	0-2	293135	NA	NA	NA	NA	<0.60	0.97	11	<4.8	NA	NA	NA	NA	NA	NA
KB-31	5/15/2001	0-2	293137	NA	NA	NA	NA	<0.59	13	NA	38	NA	NA	NA	NA	NA	NA
KB-32	5/15/2001	0-2	293139	NA	NA	NA	NA	<0.56	16	NA	70	NA	NA	NA	NA	NA	NA
KB-33	5/15/2001	0-2	293144	NA	NA	NA	NA	<0.57	11	NA	18	NA	NA	NA	NA	NA	NA
KB-34	5/16/2001	0-2	293147	NA	NA	NA	NA	<0.55	18	NA	150	NA	NA	NA	NA	NA	NA
KB-35	5/16/2001	0-2	293149	NA	NA	NA	NA	<0.57	27	NA	940	NA	NA	NA	NA	NA	NA
KB-36	5/16/2001	0-2	293152	NA	NA	NA	NA	<0.57	15	NA	<4.5	NA	NA	NA	NA	NA	NA
KB-37	5/16/2001	0-2	293155	NA	NA	NA	NA	<0.57	13	NA	13	NA	NA	NA	NA	NA	NA
KB-38	5/16/2001	0-2	293157	NA	NA	NA	NA	<0.60	14	NA	<4.8	NA	NA	NA	NA	NA	NA
KB-113	5/16/2001	0-2	293160	NA	NA	NA	NA	<0.61	17	NA	<4.9	NA	NA	NA	NA	NA	NA
KB-114	5/18/2001	0-2	293308	NA	NA	NA	NA	<0.53	11	NA	<4.2	NA	NA	NA	NA	NA	NA
KB-115	5/16/2001	1.5-2	293163	NA	NA	NA	NA	<0.56	9.8	NA	<4.4	NA	NA	NA	NA	NA	NA
KB-116	5/16/2001	1.5-2	293168	NA	NA	NA	NA	<0.56	9.8	NA	<4.4	NA	NA	NA	NA	NA	NA
KB-117	5/18/2001	0-2	293303	NA	NA	NA	NA	<0.56	8.8	NA	<4.4	NA	NA	NA	NA	NA	NA
KB-117 Dup.	5/18/2001	0-2	293304	NA	NA	NA	NA	<0.53	11	NA	<4.3	NA	NA	NA	NA	NA	NA
KB-118	5/18/2001	0-2	293305	NA	NA	NA	NA	<0.54	10	NA	<4.3	NA	NA	NA	NA	NA	NA
KB-118 Dup.	5/18/2001	0-2	293306	NA	NA	NA	NA	<0.54	10	NA	<4.3	NA	NA	NA	NA	NA	NA
KB-119	5/18/2001	0-2	293307	NA	NA	NA	NA	<0.60	16	NA	<4.8	NA	NA	NA	NA	NA	NA
Tier II Residential Cleanup Goals Surface Soil ⁽¹⁾																	
				NA	81	10,000	0.5	135	1,350	9,990 ⁽³⁾	400 ⁽⁴⁾	16.2	5,400	1,350	1,350	NA	NA
Tier II Non-Residential Cleanup Goals Surface Soil ⁽¹⁾																	
				NA	612	10,000	13.49	1,020	10,000	378,000 ⁽³⁾	1,000 ⁽⁴⁾	122.4	10,000	10,000	10,000	NA	NA
Common Background Ranges ⁽²⁾																	
				NA	1.0 - 40	100 - 3,500	NA	0.01 - 70	5.0 - 3,000	NA	2 - 200	0.01 - 4.15	NA	0.1 - 2.0	0.1 - 50	NA	NA

Detected compound exceeds the VRP Tier I Non-Residential Cleanup Goal
Detected compound exceeds the VRP Tier II Residential Cleanup Goal
Detected compound is below the VRP Tier II Residential Cleanup Goal

Samples analyzed using EPA Method Series 6000/7000

mg/kg = milligrams per kilogram

NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management/Voluntary Remediation Program Resource Guide, Appendix F

Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Source: James Dragun, The Soil Chemistry of Hazardous Materials Table 3.1 Native Soil Concentration of Various Elements: p.229, 1998.

⁽³⁾ Calculated using surrogate toxicity values and Tier II equations.

⁽⁴⁾ IDEM VRP Interoffice Memo dated on January 26, 1998.

Table 7a
Subsurface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allcation Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6591004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Acetone	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromoform	Bromomethane (Methyl Bromide)	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane (Methyl Chloride)	2-Chlorotoluene	4-Chlorotoluene	2-Chloroethyl vinyl ether
GP-1	12/19/1996	5-7	W6 20376-02	<0.020	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.010	NA	NA	<0.210
GP-2	12/19/1996	5-7	W6 20376-04	<0.020	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.010	NA	NA	<0.210
GP-3	12/19/1996	5-7	W6 20376-06	<0.020	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.010	NA	NA	<0.210
GP-4	12/19/1996	5-7	W6 20376-08	<0.020	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.010	NA	NA	<0.210
GP-5	12/19/1996	5-7	W6 20376-10	<0.020	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.010	NA	NA	<0.210
GP-6	12/19/1996	5-7	W6 20376-12	<0.020	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.010	NA	NA	<0.210
HP-1	9/6/1995	3-5	W5900064-04	<0.020	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.010	NA	NA	<0.210
HW-1	3/17/2004	11-13	503198699	<0.11	<0.11	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.011	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	
KB-2	3/17/2004	11-13	503198715	<0.11	<0.11	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.011	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	
KB-17	5/22/2000	10-12	265075	<0.100	<0.25	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.020	<0.010	<0.005	<0.005	
KB-20	7/12/2000	14-16	270505	<0.100	<0.25	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.020	<0.010	<0.005	<0.005	
KB-24	7/12/2000	18-20	271016	<0.100	<0.25	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.020	<0.010	<0.005	<0.005	
KB-33	5/15/2001	4-6	293128	<5.4	<130	<2.6	<2.6	<2.6	<2.6	<5.4	144	56	<2.6	<2.6	<2.6	<2.6	<2.6	<5.4	<1	<5.4	<2.5	<2.6	
KB-40	9/17/2002	6-8	328355	<5.54	<13.9	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	
KB-44	9/17/2002	6-8	328354	<0.217	<0.542	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	
KB-45	9/17/2002	6-8	328353	2.52	<5.49	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	
KB-46	9/17/2002	6-8	328356	<1.99	<2.72	<0.054	<0.054	<0.054	<0.054	<0.054	<0.109	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.109	<0.218	<0.109	<0.054	<0.054	
KB-47	9/18/2002	6-8	328357	<11	<27.6	<0.054	<0.054	<0.054	<0.054	<0.054	<0.109	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.109	<0.218	<0.109	<0.054	<0.054	
KB-48	8/29/2003	12-14	874741	<0.119	<0.0597	<0.050	<0.050	<0.050	<0.050	<0.050	<0.119	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.119	<0.050	<0.050	<0.050	<0.050	
KB-49	8/29/2003	14-16	874742	<0.104	<0.0520	<0.052	<0.052	<0.052	<0.052	<0.052	<0.104	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052	<0.104	<0.052	<0.052	<0.052	<0.052	
KB-50	8/29/2003	18-20	874743	<0.109	<0.0544	<0.054	<0.054	<0.054	<0.054	<0.054	<0.109	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.109	<0.054	<0.054	<0.054	<0.054	
KB-51	8/29/2003	14-16	874739	<0.109	<0.0546	<0.055	<0.055	<0.055	<0.055	<0.055	<0.109	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.109	<0.055	<0.055	<0.055	<0.055	
KB-51 DLR	8/29/2003	14-16	874740	<0.114	<0.0571	<0.057	<0.057	<0.057	<0.057	<0.057	<0.114	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.114	<0.057	<0.057	<0.057	<0.057	
KB-41	5/1/2001	2-4	291956	<0.120	<0.300	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	
KB-42	5/1/2001	4-6	291957	<0.120	<0.300	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	
KB-43	5/1/2001	5-6	291958	6.12	<0.290	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	
KB-44	5/1/2001	4-6	291959	<0.120	<0.290	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	
KB-45	5/1/2001	13.5-14	291960	<0.120	<0.310	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	
KB-46	5/1/2001	4-6	291961	<0.120	<0.300	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	
KB-47	5/1/2001	4-6	291962	<0.120	<0.300	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	
KB-48	5/1/2001	3-4	291963	<0.120	<0.310	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	
KB-49	5/1/2001	4-6	291964	<0.120	<0.300	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	
KB-17	5/1/2001	2-4	291965	<0.120	<0.300	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	
KB-18	5/1/2001	2-4	291966	<0.120	<0.300	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	
KB-49	5/1/2001	2-4	291967	<0.120	<0.300	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	<0.059	<0.059	<0.120	<0.059	<0.059	<0.059	<0.059	
Tier II Residential Cleanup Goals Subsurface Soil ⁽¹⁾				22.793	NA	0.059	NA	NA	NA	NA	33.5 ⁽²⁾	30.1 ⁽²⁾	22.9 ⁽²⁾	182 ⁽²⁾	NA	11.1 ⁽²⁾	NA	1.000	2.082	NA	NA	NA	NA
Tier II Non-Residential Cleanup Goals Subsurface Soil ⁽¹⁾				136.29	NA	4.77	NA	NA	NA	NA	972 ⁽²⁾	725 ⁽²⁾	868 ⁽²⁾	1,300 ⁽²⁾	NA	803 ⁽²⁾	NA	1.000	20.33	NA	NA	NA	NA

VOCs = Volatile Organic Compounds
mg/kg = milligrams per kilogram
Samples analyzed using EPA SW-846 Method 8260 - NA = Not Applicable
1,1,1,2,2,2-Hexachloroethane and trans-1,2-Dichloroethene results are combined
(1) Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Response, July 1996.
(2) Calculated using surrogate toxicity values and Tier II equations.
(3) Source: EPA Region 3 Risk-Based Concentration Table - October 1996 Update.

Table 7a
Subsurface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allocation Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991/004
KERANIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Acetone	Acrolein	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromoform	tert-Butylbenzene	sec-Butylbenzene	nert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane (Methyl Chloride)	Chlorobutene	Chlorobutene	Chloroethyl vinyl ether	
KB-12	5/1/2001	2-4	293166	<0.120	<0.300	<0.300	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	
KB-13	5/16/2001	2-4	293161	<0.110	<0.290	<0.290	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	
KB-14	5/16/2001	2-4	293309	<0.130	<0.320	<0.320	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	
KB-15	5/16/2001	10-12	293165	<0.110	<0.280	<0.280	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	
KB-15 Dup	5/16/2001	10-12	293166	<0.110	<0.280	<0.280	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	
KB-16	5/16/2001	8-10	293170	<0.110	<0.270	<0.270	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	
KB-17	5/18/2001	8-10	293312	<0.480	<1.20	<1.20	<0.024	<0.024	<0.024	<0.024	<0.049	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	
KB-17 Dup	5/18/2001	8-10	293313	<0.510	<1.30	<1.30	<0.026	<0.026	<0.026	<0.026	<0.051	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	
KB-18	5/18/2001	8-10	293317	<0.100	<0.260	<0.260	<0.0052	<0.0052	<0.0052	<0.0052	<0.010	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.010	<0.010	<0.010	<0.0052	<0.0052	<0.0052	
KB-19	5/18/2001	8-10	293318	<0.100	<0.260	<0.260	<0.0053	<0.0053	<0.0053	<0.0053	<0.010	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.010	<0.010	<0.010	<0.0053	<0.0053	<0.0053	
MW-152	6/27/1995	8-10	W5060414-04	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	<0.005	<0.005	<0.005	NA	<0.010	<0.005	<0.010	NA	NA	<0.010	
MW-152	6/28/1995	18-20	W5060414-01	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	<0.005	<0.005	<0.005	NA	<0.010	<0.005	<0.010	NA	NA	<0.010	
MW-154	6/29/1995	8-10	W5060414-02	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	<0.005	<0.005	<0.005	NA	<0.010	<0.005	<0.010	NA	NA	<0.010	
MW-154	6/29/1995	18-20	W5060414-03	<0.020	NA	NA	<0.025	NA	<0.025	<0.025	<0.050	NA	NA	<0.025	<0.025	<0.025	NA	<0.050	<0.025	<0.050	NA	NA	<0.010	
MW-155	9/5/1995	13-15	W5090664-01	<0.100	NA	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	<0.005	<0.005	<0.005	NA	<0.010	<0.005	<0.010	NA	NA	<0.010	
MW-155	9/5/1995	28-30	W5090664-02	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	<0.005	<0.005	<0.005	NA	<0.010	<0.005	<0.010	NA	NA	<0.010	
MW-156	9/5/1995	18-20	W5090664-03	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	<0.005	<0.005	<0.005	NA	<0.010	<0.005	<0.010	NA	NA	<0.010	
MW-157	12/31/1997	3-5	W7010365-01	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	<0.005	<0.005	<0.005	NA	<0.010	<0.005	<0.010	NA	NA	<0.010	
MW-158	12/31/1997	8-10	W7010365-02	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	<0.005	<0.005	<0.005	NA	<0.010	<0.005	<0.010	NA	NA	<0.010	
MW-173	3/1/2004	11-13	503198723	<0.11	<0.11	<0.11	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	
MW-173	3/1/2004	13-15	503198731	<0.12	<0.12	<0.12	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	
MW-200	7/10/1995	13-15	W5070142-01	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	<0.005	<0.005	<0.005	NA	<0.010	<0.005	<0.010	NA	NA	<0.010	
MW-200	7/14/1995	48-50	W5070171-01	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	<0.005	<0.005	<0.005	NA	<0.010	<0.005	<0.010	NA	NA	<0.010	
MW-201	7/11/1995	18-20	W5070142-02	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	<0.005	<0.005	<0.005	NA	<0.010	<0.005	<0.010	NA	NA	<0.010	
MW-201	7/11/1995	38-40	W5070142-04	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	<0.005	<0.005	<0.005	NA	<0.010	<0.005	<0.010	NA	NA	<0.010	
MW-202	7/11/1995	13-15	W5070142-03	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	<0.005	<0.005	<0.005	NA	<0.010	<0.005	<0.010	NA	NA	<0.010	
MW-202	7/11/1995	33-35	W5070142-05	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	<0.005	<0.005	<0.005	NA	<0.010	<0.005	<0.010	NA	NA	<0.010	
MW-302	1/31/1997	48-50	W7010425-02	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	<0.005	<0.005	<0.005	NA	<0.010	<0.005	<0.010	NA	NA	<0.010	
MW-302	1/31/1997	63-65	W7010425-03	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.010	NA	NA	<0.005	<0.005	<0.005	NA	<0.010	<0.005	<0.010	NA	NA	<0.010	
SH10-1	3/1/994	2-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SH10-2	3/1/994	6-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SH10-3	3/1/994	4-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SH10-4	3/1/994	6-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SH10-5	3/1/994	14-16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Tier II Residential Cleanup Goals Subsurface Soil ⁽¹⁾				22,793	NA	NA	0.059	NA	NA	0.003389 ⁽²⁾	NA	NA	33.5 ⁽²⁾	725 ⁽²⁾	868 ⁽²⁾	182 ⁽²⁾	NA	11.1 ⁽²⁾	NA	1,000	2,082	NA	NA	NA
Tier II Non-Residential Cleanup Goals Subsurface Soil ⁽¹⁾				156,29	NA	NA	4.77	NA	NA	0.692 ⁽²⁾	NA	NA	972 ⁽²⁾	868 ⁽²⁾	1,300 ⁽²⁾	NA	803 ⁽²⁾	NA	1,000	20,33	NA	NA	NA	NA

Detectable compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Health Evaluation by Office of Environmental Response, July 1996.

⁽¹⁾ Calculated using average toxicity values and Tier II equation.

⁽²⁾ Source: EPA Region 3 Risk-based Concentration Table - October 1998 Update.

Table 7a
Subsurface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allocation Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Acetone	Acrolein	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane (Methyl Bromide)	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane (Methyl Chloride)	2-Chlorotoluene	4-Chlorotoluene	2-Chloroethyl vinyl ether
SB-132	9/1/992	8-10	NA	<6.3	NA	NA	<3.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-133	9/1/992	3-5	NA	<1.3	NA	NA	<0.63	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-134	9/1/992	8-10	NA	<0.01	NA	NA	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-135	9/1/992	8-10	NA	<0.01	NA	NA	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-135 Dup	9/1/992	8-10	NA	<0.01	NA	NA	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-145	6/22/1993	13-15	69803	<2	<5	<5	<0.1	NA	NA	<0.1	<0.5	NA	NA	NA	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	NA	NA	<0.5
SB-145 Dup	6/22/1993	13-15	69804	<2	<5	<5	<0.1	NA	NA	<0.1	<0.5	NA	NA	NA	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	NA	NA	<0.5
SB-146	6/22/1993	23-30	69805	<0.02	<0.01	<0.01	<0.005	NA	NA	<0.005	<0.005	<0.01	NA	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.01	NA	NA	<0.01
SB-146 Dup	6/22/1993	23-30	69806	<0.02	<0.01	<0.01	<0.005	NA	NA	<0.005	<0.005	<0.01	NA	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.01	NA	NA	<0.01
SB-147	6/3/1993	8-10	69873	<2	<5	<5	<0.1	NA	NA	<0.1	<0.5	NA	NA	NA	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	NA	NA	<0.5
SB-147 Dup	6/3/1993	8-10	69874	<0.02	<0.01	<0.01	<0.005	NA	NA	<0.005	<0.005	<0.01	NA	NA	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	NA	NA	<0.01
SB-148	6/3/1993	23-25	69875	<2	<5	<5	<0.1	NA	NA	<0.1	<0.5	NA	NA	NA	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	NA	NA	<0.5
SB-148 Dup	6/3/1993	23-25	69876	<0.02	<0.01	<0.01	<0.005	NA	NA	<0.005	<0.005	<0.01	NA	NA	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	NA	NA	<0.01
SB-149	6/4/1993	3-5	69945	<2	<5	<5	<0.1	NA	NA	<0.1	<0.5	NA	NA	NA	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	NA	NA	<0.5
SB-150	6/4/1993	3-5	69946	<2	<5	<5	<0.1	NA	NA	<0.1	<0.5	NA	NA	NA	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	NA	NA	<0.5
SB-150 Dup	6/4/1993	3-5	69947	<2	<5	<5	<0.1	NA	NA	<0.1	<0.5	NA	NA	NA	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	NA	NA	<0.5
SB-150 Dup	6/4/1993	8-10	69947	<2	<5	<5	<0.1	NA	NA	<0.1	<0.5	NA	NA	NA	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	NA	NA	<0.5
Tier II Residential Cleanup Goals Subsurface Soil ⁽¹⁾				22,793	NA	NA	0.059	NA	NA	0.000389 ⁽²⁾	NA	NA	31.5 ⁽³⁾	30.1 ⁽²⁾	22.0 ⁽²⁾	182 ⁽²⁾	NA	11.1 ⁽²⁾	NA	1,000	2,082	NA	NA	NA	NA
Tier II Non-Residential Cleanup Goals Subsurface Soil ⁽¹⁾				136.29	NA	NA	4.77	NA	NA	0.692 ⁽²⁾	NA	NA	972 ⁽²⁾	725 ⁽²⁾	868 ⁽²⁾	1,300 ⁽²⁾	NA	803 ⁽²⁾	NA	1,000	20.33	NA	NA	NA	NA

Notes: VOCs = Volatile Organic Compounds. mg/kg = milligrams per kilogram. Samples analyzed using EPA SW-846 Method 8260. NA = Not Applicable. ⁽¹⁾ 1,2-Dichloroethene and trans-1,2-Dichloroethene results are combined. ⁽²⁾ Indian Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Response, July 1996. ⁽³⁾ Calculated using surrogate toxicity values and Tier II equations. ⁽⁴⁾ Source: EPA Region 3 Risk-Based Concentration Table - October 1998 Update.

Table 7a
Subsurface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allocation Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2529E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Chloroethane	1,2-Dibromoethane	Dibromomethane (Methylene Bromide)	1,2-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	trans-1,4-Dichloro-2-butene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	1,2-Dichloropropane	1,3-Dichloropropane	2,2-Dichloropropane	1,1-Dichloropropene	cis-1,3-Dichloropropene
KB-112	5/1/2001	2-4	291968	<0.012	<0.0060	<0.012	<0.0060	<0.0060	<0.012	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-113	5/16/2001	2-4	293161	<0.0057	<0.0057	<0.011	<0.0057	<0.0057	<0.011	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057
KB-114	5/18/2001	2-4	293309	<0.013	<0.0065	<0.013	<0.0065	<0.0065	<0.013	<0.065	<0.065	<0.065	<0.065	<0.065	<0.065	<0.065	<0.065	<0.065	<0.065
KB-115	5/16/2001	10-12	293165	<0.0057	<0.0057	<0.011	<0.0057	<0.0057	<0.011	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057
KB-113 Dup	5/16/2001	10-12	293166	<0.011	<0.0056	<0.011	<0.0056	<0.0056	<0.011	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056
KB-116	5/16/2001	10-12	293170	<0.011	<0.0054	<0.011	<0.0054	<0.0054	<0.011	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054
KB-117	5/18/2001	4-10	293312	<0.049	<0.024	<0.049	<0.024	<0.024	<0.049	<0.240	<0.240	<0.240	<0.240	<0.240	<0.240	<0.240	<0.240	<0.240	<0.240
KB-117 Dup	5/18/2001	4-10	293313	<0.051	<0.026	<0.051	<0.026	<0.026	<0.051	<0.260	<0.260	<0.260	<0.260	<0.260	<0.260	<0.260	<0.260	<0.260	<0.260
KB-118	5/18/2001	4-10	293317	<0.010	<0.0052	<0.010	<0.0052	<0.0052	<0.010	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102
KB-119	5/18/2001	4-10	293318	<0.011	<0.0053	<0.011	<0.0053	<0.0053	<0.011	<0.103	<0.103	<0.103	<0.103	<0.103	<0.103	<0.103	<0.103	<0.103	<0.103
MW-152	6/27/1995	4-10	W5060414-04	NA	NA	<0.005	<0.010	<0.010	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
MW-152	6/28/1995	18-20	W5060414-01	NA	NA	<0.005	<0.010	<0.010	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
MW-154	6/29/1995	4-10	W5060414-02	NA	NA	<0.005	<0.010	<0.010	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
MW-154	6/29/1995	18-20	W5060414-03	NA	NA	<0.005	<0.010	<0.010	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
MW-155	9/5/1995	13-15	W5090644-01	NA	NA	<0.025	<0.050	<0.050	NA	NA	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA	NA
MW-155	9/5/1995	28-30	W5090644-02	NA	NA	<0.005	<0.010	<0.010	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
MW-156	9/5/1995	18-20	W5090644-03	NA	NA	<0.005	<0.010	<0.010	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
MW-157	12/31/1997	3-5	W7010425-01	NA	NA	<0.005	<0.010	<0.010	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
MW-158	12/31/1997	4-10	W7010425-02	NA	NA	<0.005	<0.010	<0.010	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
MW-173	3/17/2004	11-13	503198731	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.011	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055
MW-173	3/17/2004	13-15	503198731	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.12	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058
MW-200	7/10/1995	13-15	W5070142-01	NA	NA	<0.005	<0.010	<0.010	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
MW-200	7/14/1995	48-50	W5070171-01	NA	NA	<0.005	<0.010	<0.010	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
MW-201	7/11/1995	18-20	W5070142-02	NA	NA	<0.005	<0.010	<0.010	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
MW-201	7/11/1995	38-40	W5070142-04	NA	NA	<0.005	<0.010	<0.010	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
MW-202	7/11/1995	13-15	W5070142-03	NA	NA	<0.005	<0.010	<0.010	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
MW-202	7/11/1995	33-35	W5070142-05	NA	NA	<0.005	<0.010	<0.010	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
MW-302	1/31/1997	48-50	W7010425-02	NA	NA	<0.005	<0.010	<0.010	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
MW-302	1/31/1997	63-65	W7010425-03	NA	NA	<0.005	<0.010	<0.010	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
SB10-1	3/1994	2-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB10-2	3/1994	6-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB10-3	3/1994	4-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB10-4	3/1994	6-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB10-5	3/1994	14-16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tier II Residential Cleanup Goals Subsurface Soil ⁽¹⁾				NA	NA	NA	2,524.23	NA	0.897	NA	40.074	0.025	0.084	17.14	3.23 ⁽²⁾	NA	NA	0.00764 ⁽²⁾	NA
Tier II Non-Residential Cleanup Goals Subsurface Soil ⁽¹⁾				NA	NA	NA	NA	NA	NA	NA	1,000	0.37	0.080	102.49	193 ⁽²⁾	NA	NA	1.36 ⁽²⁾	NA

Detected compound exceeds the YRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the YRP Tier II Residential Cleanup Goal

Detected compound exceeds the YRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds mg/kg = milligrams per kilogram

NA = Not Applicable

Sample analyzed using EPA SW-846 Method 8260

*cis-1,2-Dichloroethene and trans-1,2-Dichloroethene results are combined

(1) Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Illinois

Health Evaluation by Office of Environmental Response, July 1996

(2) Calculated using surrogate toxicity values and Tier II equations.

(3) Source: EPA Region 3 Risk-Based Concentration Table - October 1998 Update.

Table 7a: Subsurface Soil - VOCs
Page 5 of 12

Table 7a
Subsurface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allenton Gas Turbine Division, Plant 16
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	1,2-Dibromopropane	1,2-Dibromethane	1,2-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	trans-1,4-Dichloro-2-butene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethylene	cis-1,2-Dichloroethylene	trans-1,2-Dichloroethylene	1,2-Dichloropropane	1,3-Dichloropropane	2,2-Dichloropropane	1,1-Dichloropropane	cis-1,3-Dichloropropene
SB-132	9/1/1992	8-10	NA	NA	NA	NA	NA	NA	NA	<3.1	<3.1	NA	<0.63	12	NA	NA	NA	NA	NA
SB-133	9/1/1992	3-5	NA	NA	NA	NA	NA	NA	NA	<0.63	<0.63	NA	<0.63	13	NA	NA	NA	NA	NA
SB-134	9/1/1992	8-10	NA	NA	NA	NA	NA	NA	NA	<0.005	<0.005	NA	<0.005	<0.005	NA	NA	NA	NA	NA
SB-135	9/1/1992	8-10	NA	NA	NA	NA	NA	NA	NA	<0.005	<0.005	NA	<0.005	<0.005	NA	NA	NA	NA	NA
SB-135 Dup	9/1/1992	8-10	NA	NA	NA	NA	NA	NA	NA	<0.005	<0.005	NA	<0.005	<0.005	NA	NA	NA	NA	NA
SB-145	6/27/1993	18-15	69803	<1.0	<0.1	<0.1	<0.1	<1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA	NA	NA	<0.1
SB-145 Dup	6/27/1993	18-15	69804	<1.0	<0.1	<0.1	<0.1	<1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA	NA	NA	<0.1
SB-145	6/27/1993	23-30	69805	<0.01	<0.005	<0.005	<0.005	<0.01	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	<0.005
SB-146	6/27/1993	13-15	69806	<0.01	<0.005	<0.01	<0.005	<0.01	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	<0.005
SB-146	6/27/1993	23-25	69807	<0.01	<0.005	<0.01	<0.005	<0.01	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	<0.005
SB-147	6/3/1993	8-10	69873	<1.0	<0.1	<0.1	<0.1	<1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA	NA	NA	<0.1
SB-147	6/3/1993	28-30	69874	<0.01	<0.005	<0.01	<0.005	<0.01	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	<0.005
SB-148	6/3/1993	8-10	69875	<1.0	<0.1	<0.1	<0.1	<1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA	NA	NA	<0.1
SB-148	6/3/1993	23-25	69876	<0.01	<0.005	<0.01	<0.005	<0.01	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	<0.005
SB-149	6/4/1993	3-5	69945	<1.0	<0.1	<0.1	<0.1	<1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA	NA	NA	<0.1
SB-150	6/4/1993	3-5	69946	<1.0	<0.1	<0.1	<0.1	<1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA	NA	NA	<0.1
SB-150	6/4/1993	8-10	69947	<1.0	<0.1	<0.1	<0.1	<1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA	NA	NA	<0.1
Tier II Residential Cleanup Goals Subsurface Soil ⁽¹⁾																			
Tier II Non-Residential Cleanup Goals Subsurface Soil ⁽¹⁾				NA	NA	NA	2,524.23	NA	0.897	NA	40.074	0.025	0.084	17.14	3.23 ⁽²⁾	NA	NA	NA	NA
Tier II Non-Residential Cleanup Goals Subsurface Soil ⁽¹⁾				NA	NA	NA	10,000	NA	34.67	NA	1,000	0.37	0.080	102.49	193 ⁽²⁾	NA	NA	NA	NA

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal.
Detected compound exceeds the VRP Tier II Residential Cleanup Goal.
Detected compound exceeds the VRP Tier II Residential Cleanup Goal.
VOCs = Volatile Organic Compounds mg/kg = milligrams per kilogram
Samples analyzed using EPA SW-846 Method 8260 NA = Not Applicable
cis-1,2-Dichloroethylene and trans-1,2-Dichloroethylene results are combined
(1) Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F: Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Response, July 1996.
(2) Calculated using surrogate toxicity values and Tier II equations.
(3) Source: EPA Region 3 Risk-Based Concentration Table - October 1998 Update.

Table 7a
Subsurface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Alicia Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	trans-1,3-Dichloropropene	Ethylbenzene	Ethyl methacrylate	2-Hexanone	Hexachlorobutadiene	Iodomethane	Isopropylbenzene	p-Isopropyltoluene	Methylene chloride	Methyl Ethyl ketone	MTBE (Methyl tert-butyl ether)	4-Methyl-2-pentanone (MIBK)	Naphthalene	n-Propylbenzene	Styrene	1,1,2-Tetrachloroethane	1,1,2-Tetrachloroethane	Tetrachloroethene	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene
KB-112	5/17/2001	2-4	291968	<0.0063	<0.0060	<0.012	<0.060	<0.012	<0.012	<0.0060	0.135	<0.030	<0.060	<0.012	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-113	5/16/2001	2-4	293161	<0.0057	<0.0057	<0.011	<0.057	<0.0057	<0.011	<0.0057	<0.0057	<0.029	<0.057	<0.011	<0.057	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-114	5/18/2001	2-4	293309	<0.0065	<0.0065	<0.013	<0.065	<0.0065	<0.013	<0.0065	0.033	0.033	<0.065	<0.013	<0.065	<0.065	<0.065	<0.065	<0.065	<0.065	<0.065	<0.065	<0.065	<0.065
KB-115	5/16/2001	10-12	293165	<0.0057	<0.0057	<0.011	<0.057	<0.0057	<0.011	<0.0057	<0.0057	<0.028	<0.057	<0.011	<0.057	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-115 Dup	5/16/2001	10-12	293166	<0.0056	<0.0056	<0.011	<0.056	<0.0056	<0.011	<0.0056	<0.0056	<0.028	<0.056	<0.011	<0.056	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-116	5/16/2001	8-10	293170	<0.0054	<0.0054	<0.011	<0.054	<0.0054	<0.011	<0.0054	<0.0054	<0.027	<0.054	<0.011	<0.054	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-117	5/18/2001	8-10	293312	<0.024	<0.024	<0.049	<0.240	<0.024	<0.049	<0.024	<0.024	<0.130	<0.240	<0.049	<0.240	<0.024	<0.024	<0.024	<0.024	<0.024	0.124	<0.024	<0.024	<0.024
KB-117 Dup	5/18/2001	8-10	293313	<0.026	<0.026	<0.051	<0.260	<0.026	<0.051	<0.026	<0.026	<0.130	<0.260	<0.051	<0.260	<0.026	<0.026	<0.026	<0.026	<0.026	0.126	<0.026	<0.026	<0.026
KB-118	5/18/2001	8-10	293317	<0.0052	<0.0052	<0.019	<0.052	<0.0052	<0.019	<0.0052	<0.0052	0.033	<0.052	<0.019	<0.052	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-119	5/18/2001	8-10	293318	<0.0053	<0.0053	<0.011	<0.053	<0.0053	<0.011	<0.0053	<0.0053	0.033	<0.053	<0.011	<0.053	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
NW-152	6/27/1995	8-10	W5900414-04	<0.005	<0.005	NA	<0.020	NA	NA	NA	NA	<0.010	<0.020	NA	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.005	NA	NA
NW-152	6/28/1995	18-20	W5900414-01	<0.005	<0.005	NA	<0.020	NA	NA	NA	NA	<0.010	<0.020	NA	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.005	NA	NA
NW-154	6/29/1995	8-10	W5900414-02	<0.005	<0.005	NA	<0.020	NA	NA	NA	NA	<0.010	<0.020	NA	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.005	NA	NA
NW-154	6/29/1995	18-20	W5900414-03	<0.005	<0.005	NA	<0.020	NA	NA	NA	NA	<0.010	<0.100	NA	<0.100	NA	NA	<0.025	NA	<0.025	<0.025	<0.025	NA	NA
NW-155	9/5/1995	13-15	W590064-01	<0.025	<0.025	NA	<0.100	NA	NA	NA	NA	<0.050	<0.100	NA	<0.100	NA	NA	<0.025	NA	<0.025	<0.025	<0.025	NA	NA
NW-155	9/5/1995	28-30	W590064-02	<0.005	<0.005	NA	<0.020	NA	NA	NA	NA	<0.010	<0.020	NA	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.005	NA	NA
NW-156	9/5/1995	18-20	W590064-03	<0.005	<0.005	NA	<0.020	NA	NA	NA	NA	<0.010	<0.020	NA	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.005	NA	NA
NW-157	1/23/1997	3-5	W7010365-01	<0.005	<0.005	NA	<0.020	NA	NA	NA	NA	0.033	<0.020	NA	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.005	NA	NA
NW-158	1/23/1997	8-10	W7010365-02	<0.005	<0.005	NA	<0.020	NA	NA	NA	NA	0.033	<0.020	NA	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.005	NA	NA
NW-173	3/1/2004	11-13	503198723	<0.0055	<0.0055	<0.011	<0.011	<0.0055	<0.011	<0.0055	<0.0055	<0.022	<0.011	<0.0055	<0.011	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055
NW-173	3/1/2004	13-15	503198731	<0.0058	<0.0058	<0.012	<0.012	<0.0058	<0.012	<0.0058	<0.0058	<0.023	<0.012	<0.0058	<0.012	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058
NW-200	7/10/1995	13-15	W5070142-01	<0.005	<0.005	NA	<0.020	NA	NA	NA	NA	<0.010	<0.020	NA	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.005	NA	NA
NW-200	7/10/1995	48-50	W5070171-01	<0.005	<0.005	NA	<0.020	NA	NA	NA	NA	<0.010	<0.020	NA	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.005	NA	NA
NW-201	7/11/1995	18-20	W5070142-02	<0.005	<0.005	NA	<0.020	NA	NA	NA	NA	<0.010	<0.020	NA	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.005	NA	NA
NW-201	7/11/1995	38-40	W5070142-04	<0.005	<0.005	NA	<0.020	NA	NA	NA	NA	<0.010	<0.020	NA	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.005	NA	NA
NW-202	7/11/1995	13-15	W5070142-03	<0.005	<0.005	NA	<0.020	NA	NA	NA	NA	<0.010	<0.020	NA	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.005	NA	NA
NW-202	7/11/1995	33-35	W5070142-05	<0.005	<0.005	NA	<0.020	NA	NA	NA	NA	<0.010	<0.020	NA	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.005	NA	NA
NW-302	1/31/1997	48-50	W7010425-02	<0.005	<0.005	NA	<0.020	NA	NA	NA	NA	0.033	<0.020	NA	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.005	NA	NA
NW-302	1/31/1997	63-65	W7010425-03	<0.005	<0.005	NA	<0.020	NA	NA	NA	NA	0.033	<0.020	NA	<0.020	NA	NA	<0.005	NA	<0.005	<0.005	<0.005	NA	NA
SR10-1	3/1994	2-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.001	<0.001	NA	NA
SR10-2	3/1994	6-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.001	<0.001	NA	NA
SR10-3	3/1994	4-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.001	<0.001	NA	NA
SR10-4	3/1994	6-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.120	<0.120	NA	NA
SR10-5	3/1994	14-16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.120	<0.120	NA	NA
Tier II Residential Cleanup Goals: Subsurface Soil ⁽¹⁾				NA	834,372	NA	NA	6,777	NA	185 ⁽²⁾	441 ⁽²⁾	0.0255 ⁽²⁾	11.62	0.35	68.147	1,767,785	33.5 ⁽²⁾	NA	0.076	0.044	0.227	278.926	NA	235.033
Tier II Non-Residential Cleanup Goals: Subsurface Soil ⁽¹⁾				NA	1,000	NA	NA	31.18	NA	185 ⁽²⁾	1,000 ⁽²⁾	10.0 ⁽²⁾	146.24	5.6	407.48	10,000	972 ⁽²⁾	410,000 ⁽³⁾	7.24	0.21	8.01	1,000	NA	1,405.37

⁽¹⁾ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

⁽²⁾ Detected compound exceeds the VRP Tier II Residential Cleanup Goal

⁽³⁾ Calculated using surrogate toxicity values and Tier II equations.

⁽⁴⁾ Source: EPA Region 3 Risk Based Concentration Table - October 1998 Update.

VOCs = Volatile Organic Compounds mg/kg = milligrams per kilogram

Samples analyzed using EPA SW 846 Method 8260 NA = Not Applicable

*1,1,2-Trichloroethene and trans-1,2-Dichloroethene results are combined

⁽⁵⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human

Health Evaluation by Office of Environmental Response, July 1996.

⁽⁶⁾ Calculated using surrogate toxicity values and Tier II equations.

⁽⁷⁾ Source: EPA Region 3 Risk Based Concentration Table - October 1998 Update.

Table 7a - Subsurface Soil - VOCs
Page 8 of 12

Table 7a
Subsurface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allenton Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #691004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	trans-1,2-Dichloroethene	Ethylbenzene	Ethyl methacrylate	2-Hexanone	Hexachlorobutadiene	Indomethane	Isopropylbenzene	p-Isopropyltoluene	Methylene chloride	Methyl Ethyl Ketone	Methyl (tert) butyl ether (MTBE)	4-Methyl-2-pentanone (MIBK)	Naphthalene	n-Propylbenzene	Styrene	1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	1,2,4-Trichlorobenzene	1,2,4-Trichlorobenzene
SB-132	9/19/92	8-10	NA	NA	<0.1	NA	NA	NA	NA	NA	NA	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	<0.1	<0.1	NA	NA
SB-133	9/19/92	3-5	NA	NA	<0.05	NA	NA	NA	NA	NA	NA	<0.05	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	<0.05	NA	NA
SB-134	9/19/92	8-10	NA	NA	<0.005	NA	NA	NA	NA	NA	NA	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	<0.005	<0.005	NA	NA
SB-135	9/19/92	8-10	NA	NA	<0.005	NA	NA	NA	NA	NA	NA	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	<0.005	<0.005	NA	NA
SB-135 Dup	9/19/92	8-10	NA	NA	<0.005	NA	NA	NA	NA	NA	NA	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	<0.005	<0.005	NA	NA
SB-145	6/21/93	13-15	69803	<0.1	<0.1	<1.0	<1	NA	<1.0	NA	NA	<1.0	<1	NA	<1	NA	NA	<0.1	NA	<0.1	<0.1	<0.1	NA	NA
SB-145 Dup	6/21/93	13-15	69804	<0.1	<0.1	<1.0	<1	NA	<1.0	NA	NA	<1.0	<1	NA	<1	NA	NA	<0.1	NA	<0.1	<0.1	<0.1	NA	NA
SB-145	6/21/93	23-30	69805	<0.005	<0.005	<0.01	<0.01	NA	<0.01	NA	NA	<0.01	<0.01	NA	<0.01	NA	NA	<0.005	NA	<0.005	<0.005	<0.005	NA	NA
SB-146	6/21/93	13-15	69806	<0.005	<0.005	<0.01	<0.01	NA	<0.01	NA	NA	<0.01	<0.01	NA	<0.01	NA	NA	<0.005	NA	<0.005	<0.005	<0.005	NA	NA
SB-146	6/21/93	23-25	69807	<0.005	<0.005	<0.01	<0.01	NA	<0.01	NA	NA	<0.01	<0.01	NA	<0.01	NA	NA	<0.005	NA	<0.005	<0.005	<0.005	NA	NA
SB-147	6/21/93	8-10	69873	<0.1	<0.1	<1.0	<1	NA	<1.0	NA	NA	<1.0	<1	NA	<1	NA	NA	<0.1	NA	<0.1	<0.1	<0.1	NA	NA
SB-147	6/21/93	28-30	69874	<0.005	<0.005	<0.01	<0.01	NA	<0.01	NA	NA	<0.01	<0.01	NA	<0.01	NA	NA	<0.005	NA	<0.005	<0.005	<0.005	NA	NA
SB-148	6/21/93	8-10	69875	<0.1	<0.1	<1.0	<1	NA	<1.0	NA	NA	<1.0	<1	NA	<1	NA	NA	<0.1	NA	<0.1	<0.1	<0.1	NA	NA
SB-148	6/21/93	23-25	69876	<0.005	<0.005	<0.01	<0.01	NA	<0.01	NA	NA	<0.01	<0.01	NA	<0.01	NA	NA	<0.005	NA	<0.005	<0.005	<0.005	NA	NA
SB-149	6/21/93	8-10	69945	<0.1	<0.1	<1.0	<1	NA	<1.0	NA	NA	<1.0	<1	NA	<1	NA	NA	<0.1	NA	<0.1	<0.1	<0.1	NA	NA
SB-150	6/21/93	3-5	69946	<0.1	<0.1	<1.0	<1	NA	<1.0	NA	NA	<1.0	<1	NA	<1	NA	NA	<0.1	NA	<0.1	<0.1	<0.1	NA	NA
SB-150	6/21/93	8-10	69947	<0.1	<0.1	<1.0	<1	NA	<1.0	NA	NA	<1.0	<1	NA	<1	NA	NA	<0.1	NA	<0.1	<0.1	<0.1	NA	NA
Tier II Residential Cleanup Goals Subsurface Soil ⁽¹⁾				NA	834,772	NA	NA	6,777	NA	185 ⁽²⁾	441 ⁽³⁾	0.0255 ⁽²⁾	11.52	0.35	68.147	1,767.785	33.5 ⁽³⁾	NA	0.076	0.044	0.227	278.926	NA	235.033
Tier II Non-Residential Cleanup Goals Subsurface Soil ⁽¹⁾				NA	1,000	NA	NA	31.18	NA	185 ⁽²⁾	1,000 ⁽²⁾	10.9 ⁽²⁾	146.24	5.6	407.48	10,000	972 ⁽²⁾	410,000 ⁽³⁾	7.24	0.21	8.01	1,000	NA	1,405.37

⁽¹⁾ Tier II Non-Residential Cleanup Goals Subsurface Soil⁽¹⁾

⁽²⁾ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

⁽³⁾ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

⁽⁴⁾ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

VOCs = Volatile Organic Compounds

mg/kg = milligrams per kilogram

Sample analyzed using EPA SW-846 Method 8260

NA = Not Applicable

⁽⁵⁾ 1,2-Dichloroethene and trans-1,2-Dichloroethene results are combined

⁽⁶⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human

Health Evaluation by Office of Environmental Response, July 1996.

⁽⁷⁾ Calculated using surrogate toxicity values and Tier II equations.

⁽⁸⁾ Source: EPA Region 3 Risk-Based Concentration Table - October 1998 Update.

Table 7a
Subsurface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allouan Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #0591004
KERASHDA Project No. 2629E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloroethene	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	Vinyl chloride	Xylenes, Total
GP-1	12/19/1996	5-7	W6120376-02	<0.005	<0.005	13	NA	NA	NA	NA	<0.020	<0.010	<0.005
GP-2	12/19/1996	5-7	W6120376-04	<0.005	<0.005	<0.005	NA	NA	NA	NA	<0.020	<0.010	<0.005
GP-3	12/19/1996	5-7	W6120376-06	<0.005	<0.005	<0.005	NA	NA	NA	NA	<0.020	<0.010	<0.005
GP-4	12/19/1996	5-7	W6120376-08	<0.005	<0.005	0.477	NA	NA	NA	NA	<0.020	<0.010	<0.005
GP-5	12/19/1996	5-7	W6120376-10	<0.005	<0.005	0.18	NA	NA	NA	NA	<0.020	<0.010	<0.005
GP-6	12/19/1996	5-7	W6120376-12	<0.005	<0.005	0.641	NA	NA	NA	NA	<0.020	<0.010	<0.005
HP-1	9/6/1995	3-5	W500064-04	<0.005	<0.005	<0.005	NA	NA	NA	NA	<0.020	<0.010	<0.005
HP-2	3/1/2004	11-13	503198699	<0.0055	<0.0055	4.4	<0.0055	<0.0055	<0.0055	<0.0055	<0.011	<0.0023	<0.017
HP-3	3/1/2004	11-13	503198715	<0.0056	<0.0056	56	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.0023	<0.017
KB-17	5/2/2000	10-12	2650715	<0.005	<0.005	0.19	<0.005	<0.005	<0.005	<0.005	<0.010	<0.010	<0.005
KB-20	7/12/2000	14-16	270505	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.010	<0.005
KB-24	7/17/2000	11-20	271016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.010	<0.005
KB-33	5/15/2001	4-6	293128	<2.6	<2.6	2.560	<2.6	<2.6	3.59	85	<5.4	<5.4	71
KB-40	9/17/2002	6-8	328155	<0.277	<0.277	1.55	<0.277	<0.277	2.77	23.3	3.44	<0.554	3.85
KB-44	9/17/2002	6-8	328154	<0.011	<0.011	0.05	<0.011	<0.011	0.55	0.119	<0.022	<0.022	0.133
KB-45	9/17/2002	6-8	328153	<0.11	<0.11	5.4	<0.11	<0.11	<0.11	<0.11	<0.23	<0.23	<0.11
KB-46	9/17/2002	6-8	328156	<0.054	<0.054	<0.054	<0.054	<0.054	16.9	5.85	<0.109	<0.109	1.01
KB-47	9/18/2002	10-12	326912	<0.270	<0.270	<0.270	<0.270	<0.270	27.8	5.95	<0.550	<0.550	0.997
KB-48	8/29/2003	6-8	328157	<0.552	<0.552	51.9	<0.552	<0.552	12.2	2.98	<1.1	<1.1	4.9
KB-49	8/29/2003	13-14	874741	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-50	8/29/2003	14-16	874742	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062
KB-51	8/29/2003	13-20	874743	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064
KB-51 EX.P	8/29/2003	14-16	874739	<0.065	<0.065	10.4	<0.065	<0.065	<0.065	<0.065	<0.065	<0.065	<0.065
KB-11	5/1/2001	2-4	291956	<0.067	<0.067	1.38	<0.067	<0.067	<0.067	<0.067	<0.067	<0.067	<0.067
KB-12	5/1/2001	4-6	291957	<0.069	<0.069	8.81	<0.069	<0.069	<0.069	<0.069	<0.069	<0.069	<0.069
KB-13	5/1/2001	4-6	291958	<0.069	<0.069	0.727	<0.069	<0.069	<0.069	<0.069	<0.069	<0.069	<0.069
KB-14	5/1/2001	4-6	291959	<0.069	<0.069	0.44	<0.069	<0.069	<0.069	<0.069	<0.069	<0.069	<0.069
KB-15	5/1/2001	13.5-14	291960	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062
KB-16	5/1/2001	4-6	291961	<0.064	<0.064	0.68	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064
KB-17	5/1/2001	4-6	291962	<0.061	<0.061	0.61	<0.061	<0.061	<0.061	<0.061	<0.061	<0.061	<0.061
KB-18	5/1/2001	3-4	291963	<0.062	<0.062	0.23	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062
KB-19	5/1/2001	4-6	291964	<0.061	<0.061	0.21	<0.061	<0.061	<0.061	<0.061	<0.061	<0.061	<0.061
KB-20	5/1/2001	2-4	291965	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-21	5/1/2001	2-4	291966	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-22	5/1/2001	2-4	291967	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-23	5/1/2001	2-4	291968	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-24	5/1/2001	2-4	291969	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-25	5/1/2001	2-4	291970	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-26	5/1/2001	2-4	291971	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-27	5/1/2001	2-4	291972	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-28	5/1/2001	2-4	291973	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-29	5/1/2001	2-4	291974	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-30	5/1/2001	2-4	291975	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-31	5/1/2001	2-4	291976	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-32	5/1/2001	2-4	291977	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-33	5/1/2001	2-4	291978	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-34	5/1/2001	2-4	291979	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-35	5/1/2001	2-4	291980	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-36	5/1/2001	2-4	291981	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-37	5/1/2001	2-4	291982	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-38	5/1/2001	2-4	291983	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-39	5/1/2001	2-4	291984	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-40	5/1/2001	2-4	291985	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-41	5/1/2001	2-4	291986	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-42	5/1/2001	2-4	291987	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-43	5/1/2001	2-4	291988	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-44	5/1/2001	2-4	291989	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-45	5/1/2001	2-4	291990	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-46	5/1/2001	2-4	291991	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-47	5/1/2001	2-4	291992	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-48	5/1/2001	2-4	291993	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-49	5/1/2001	2-4	291994	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-50	5/1/2001	2-4	291995	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-51	5/1/2001	2-4	291996	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-52	5/1/2001	2-4	291997	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-53	5/1/2001	2-4	291998	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-54	5/1/2001	2-4	291999	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-55	5/1/2001	2-4	292000	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-56	5/1/2001	2-4	292001	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-57	5/1/2001	2-4	292002	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-58	5/1/2001	2-4	292003	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-59	5/1/2001	2-4	292004	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-60	5/1/2001	2-4	292005	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
KB-61	5/1/2001	2-4	292006										

Table 7a
Subsurface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allenton Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	Vinyl chloride	Xylenes, Total
KB-112	5/1/2001	2-4	291666	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.012	<0.0060
KB-113	5/16/2001	2-4	293161	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.012	<0.0060
KB-114	5/16/2001	2-4	293162	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.012	<0.0060
KB-115	5/16/2001	10-12	293163	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.012	<0.0060
KB-115 Dep	5/16/2001	10-12	293166	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.012	<0.0060
KB-116	5/16/2001	8-10	293170	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.012	<0.0060
KB-117	5/18/2001	8-10	293312	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.049	<0.026
KB-117 Dep	5/18/2001	8-10	293313	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.051	<0.026
KB-118	5/18/2001	8-10	293318	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.010	<0.0052
KB-119	5/18/2001	8-10	293318	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.0053
NW-152	6/27/1995	8-10	W5060414-04	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
NW-152	6/28/1995	18-20	W5060414-01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
NW-154	6/29/1995	8-10	W5060414-03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
NW-154	6/29/1995	18-20	W5060414-03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
NW-155	9/5/1995	13-15	W5090064-01	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
NW-155	9/5/1995	28-30	W5090064-02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
NW-156	9/5/1995	18-20	W5090064-03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
NW-157	12/31/1997	3-5	W7010365-01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
NW-158	12/31/1997	8-10	W7010365-02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
NW-173	3/1/2004	11-13	501198723	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.011	<0.0022	<0.016
NW-173	3/1/2004	13-15	501198731	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.012	<0.0023	<0.017
NW-200	7/11/1995	13-15	W5070142-01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
NW-200	7/11/1995	48-50	W5070142-01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
NW-201	7/11/1995	18-20	W5070142-02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
NW-201	7/11/1995	38-40	W5070142-04	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
NW-202	7/11/1995	13-15	W5070142-03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
NW-202	7/11/1995	33-35	W5070142-05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
NW-302	1/31/1997	48-50	W7010425-02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
NW-302	1/31/1997	63-65	W7010425-03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
SB10-1	3/1/1994	2-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.001	<0.003
SB10-2	3/1/1994	6-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.005	<0.016
SB10-3	3/1/1994	4-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.001	<0.003
SB10-4	3/1/1994	6-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.120	<0.360
SB10-5	3/1/1994	14-16	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.120	<0.360
Tier II Residential Cleanup Goals Subsurface Soil ⁽¹⁾				229.642	0.035	0.076	281 ⁽²⁾	NA	1.59 ⁽²⁾	1.74 ⁽²⁾	NA	0.129	1.090
Tier II Non-Residential Cleanup Goals Subsurface Soil ⁽¹⁾				1,000	1.05	25.73	1,000 ⁽²⁾	NA	306 ⁽²⁾	124 ⁽²⁾	NA	0.13	1,090

Detected compound exceeds the VRP for Tier II Non-Residential Cleanup Goal
Detected compound exceeds the VRP for Tier II Residential Cleanup Goal
Detected compound exceeds the VRP for Tier II Non-Residential Cleanup Goal
VOCs = Volatile Organic Compounds mg/kg = milligrams per kilogram
Samples analyzed using EPA SW-846 Method 8260 NA = Not Applicable
*cis-1,2-Dichloroethylene and trans-1,2-Dichloroethylene results are combined
⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Response, July 1996.
⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.
⁽³⁾ Source: EPA Region 3 Risk-Based Concentration Table - October 1998 Update.

Table 7a
Subsurface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allentown Gas Turbine Division, Plant 10
Allentown, Indiana
IDEN VRP #6991004
KERAMIDA, Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1,2,2-Tetrachloroethane	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	Vinyl chloride	Xylenes, Total
SB-132	9/1992	8-10	NA	<0.1	NA	136	NA	NA	NA	NA	<0.3	<0.1
SB-133	9/1992	3-5	NA	<0.05	NA	14	NA	NA	NA	NA	<0.10	<0.05
SB-134	9/1992	8-10	NA	<0.005	NA	<0.005	NA	NA	NA	NA	<0.010	<0.005
SB-135	9/1992	8-10	NA	<0.005	NA	<0.005	NA	NA	NA	NA	<0.010	<0.005
SB-135 Dup	9/1992	8-10	NA	<0.005	NA	<0.005	NA	NA	NA	NA	<0.010	<0.005
SB-145	6/21/1993	13-15	69863	<0.1	<0.1	<0.1	<0.1	NA	NA	<0.5	<0.1	<0.1
SB-145 Dup	6/21/1993	13-15	69864	<0.1	<0.1	<0.100	<0.1	<0.1	NA	<0.500	<0.100	<0.100
SB-145	6/21/1993	23-30	69865	<0.005	<0.005	<0.005	<0.01	NA	NA	<0.01	<0.01	<0.005
SB-146	6/21/1993	13-15	69866	<0.005	<0.005	0.013	<0.005	<0.01	NA	<0.01	<0.01	<0.005
SB-147	6/21/1993	23-25	69867	<0.005	<0.005	<0.005	<0.01	NA	NA	<0.01	<0.01	<0.005
SB-147	6/21/1993	8-10	69873	<0.1	<0.1	23	<0.1	NA	NA	<0.5	<0.1	<0.1
SB-148	6/3/1993	28-30	69874	<0.005	<0.005	<0.005	<0.01	NA	NA	<0.01	<0.01	<0.005
SB-148	6/3/1993	8-10	69875	<0.1	<0.1	14	<0.1	NA	NA	<0.5	<0.1	<0.1
SB-148	6/3/1993	23-25	69876	<0.005	<0.005	0.013	<0.005	<0.01	NA	<0.01	<0.01	<0.005
SB-149	6/4/1993	8-10	69945	<0.1	<0.1	0.2	<0.1	<0.1	NA	<0.5	<0.1	<0.1
SB-150	6/4/1993	3-5	69946	<0.1	<0.1	4.2	<0.1	<0.1	NA	<0.5	<0.1	<0.1
SB-150	6/4/1993	8-10	69947	<0.1	<0.1	8.3	<0.1	<0.1	NA	<0.5	<0.1	<0.1
Tier II Residential Cleanup Goals Subsurface Soil ⁽¹⁾				229.642	0.035	0.076	281 ⁽²⁾	NA	1.59 ⁽²⁾	1.74 ⁽²⁾	NA	1.000
Tier II Non-Residential Cleanup Goals Subsurface Soil ⁽¹⁾				1.000	1.05	25.73	1,000 ⁽²⁾	NA	306 ⁽²⁾	124 ⁽²⁾	NA	1,000

Tier II Non-Residential Cleanup Goals Subsurface Soil⁽¹⁾

Detected compound exceeds the VRF for II Non-Residential Cleanup Goal

Detected compound exceeds the VRF for II Non-Residential Cleanup Goal

Detected compound exceeds the VRF for II Non-Residential Cleanup Goal

Detected compound exceeds the VRF for II Non-Residential Cleanup Goal

VOCs = Volatile Organic Compounds mg/kg = milligrams per kilogram

Samples analyzed using EPA SW 846 Method 8260 NA = Not Applicable

*cis-1,2-Dichloroethene and trans-1,2-Dichloroethene results are combined

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human

Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

⁽³⁾ Source: EPA Region 3 Risk-based Concentration Table - October 1998 Update.

Table 7b
Subsurface Soil Analytical Results for PAHs (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (ghi) perylene	Benzo (k) fluoranthene	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene																
KB-28	5/5/2001	2-4	293130	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39																
KB-29	5/5/2001	10-12	293131	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34																
KB-30	5/5/2001	2-4	293136	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36																
KB-31	5/5/2001	2-4	293141	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38																
KB-32	5/5/2001	8-10	293144	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35																
KB-33	5/5/2001	8-10	293146	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36																
KB-34 Dup.	5/5/2001	8-10	293173	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36																
KB-34	5/16/2001	2-4	293148	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35																
KB-35	5/6/2001	4-6	293151	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36																
KB-36	5/16/2001	8-10	293154	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35																
KB-37	5/16/2001	2-4	293156	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36																
KB-38	5/16/2001	8-10	293159	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35																
KB-48	8/29/2003	12-14	874741	<0.119	<0.119	0.345	0.677	0.833	1.062	0.813	0.333	0.623	0.219	0.431	1.258	0.739	0.663	0.633																
KB-49	8/29/2003	14-16	874742	<0.104	<0.104	<0.104	<0.104	<0.104	<0.104	<0.104	<0.104	<0.104	<0.104	<0.104	<0.104	<0.104	<0.104	<0.104																
KB-50	8/29/2003	18-20	874743	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109																
KB-51	8/29/2003	14-16	874739	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109																
KB-S1 DUP	8/29/2003	14-16	874740	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114																
KB41	5/17/2001	2-4	291956	<0.39	<0.39	1.3	3.1	1.4	1.5	1.2	0.62	2.7	0.22	0.39	0.53	0.35	0.39	7.5																
KB42	5/17/2001	4-6	291957	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39																
KB43	5/17/2001	5-6	291958	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38																
KB-14	5/17/2001	4-6	291959	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39																
KB-14	5/17/2001	4-6	291960	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41																
KB-14	5/17/2001	13.5-14	291961	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35																
KB-15	5/17/2001	4-6	291962	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40																
KB-16	5/17/2001	3-4	291963	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1																
KB-16	5/17/2001	4-6	291964	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40																
KB-17	5/17/2001	2-4	291965	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40																
KB-18	5/17/2001	2-4	291966	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39																
KB-19	5/17/2001	2-4	291967	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39																
KB-112	5/17/2001	2-4	291968	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40																
KB-113	5/16/2001	2-4	293161	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38																
KB-114	5/18/2001	2-4	293309	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43																
KB-115	5/16/2001	10-12	293365	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38																
KB-115 Dup.	5/16/2001	10-12	293366	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37																
KB-116	5/17/2001	8-10	293370	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35																
KB-117	5/18/2001	8-10	2933312	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35																
KB-117 Dup.	5/18/2001	8-10	2933313	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35																
KB-118	5/18/2001	8-10	2933317	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34																
KB-119	5/18/2001	8-10	2933318	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35																
Tier II Residential Cleanup Goals Subsurface Soil ¹⁰																			10000	0.42 ^(c)	10000	103.881	69.849	354.977	6.330 ^(d)	501.638	379.273	69.863	2.305 040	8.338 641	629.166	1,761.785	260 ^(a)	10000

mg/kg = micrograms per kilogram

PAHs = Polynuclear Aromatic Hydrocarbons
Samples analyzed using EPA SW-846 Method 8310

Samples analyzed using EPA SW-846 Method 8310

⁽¹⁾ Indiana Department of Environmental Management

⁽²⁾ Calculated using surrogate toxicity values and Tier 1²³ Tier 1 Health Protective Levels for Phenanthrene, le-

Tier I Health Protective Levels for Phenanthrene, K

100

1

Table 7c
Subsurface Soil Analytical Results for Metals (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Total Antimony	Total Arsenic	Total Barium	Total Beryllium	Total Cadmium	Total Chromium	Total Copper	Total Lead	Total Mercury	Total Nickel	Total Selenium	Total Silver	Total Thallium	Total Zinc
KB-28	5/15/2001	2-4	293130	NA	NA	NA	NA	<0.59	11 NA	<4.7	<4.7	NA	NA	NA	NA	NA	NA
KB-29	5/14/2001	2-4	293133	NA	NA	NA	NA	<0.61	28 NA	19 NA	NA	NA	NA	NA	NA	NA	NA
KB-30	5/15/2001	2-4	293136	NA	NA	NA	NA	<0.55	8 NA	NA	NA	NA	NA	NA	NA	NA	NA
KB-31	5/15/2001	2-4	293138	NA	NA	NA	NA	<0.57	8.2 NA	<4.6	NA	NA	NA	NA	NA	NA	NA
KB-32	5/15/2001	2-4	293140	NA	NA	NA	NA	<0.54	9.2 NA	<4.3	NA	NA	NA	NA	NA	NA	NA
KB-33	5/15/2001	2-4	293145	NA	NA	NA	NA	88	380 NA	24,000 NA	NA	NA	NA	NA	NA	NA	NA
KB-34	5/16/2001	2-4	293148	NA	NA	NA	NA	<0.53	7.9 NA	13 NA	NA	NA	NA	NA	NA	NA	NA
KB-35	5/16/2001	2-4	293150	NA	NA	NA	NA	<0.54	6.5 NA	5.1 NA	NA	NA	NA	NA	NA	NA	NA
KB-36	5/16/2001	2-4	293153	NA	NA	NA	NA	<0.59	19 NA	<4.7	NA	NA	NA	NA	NA	NA	NA
KB-37	5/16/2001	2-4	293156	NA	NA	NA	NA	<0.54	6.1 NA	<4.3	NA	NA	NA	NA	NA	NA	NA
KB-38	5/16/2001	2-4	293158	NA	NA	NA	NA	1.7	24 NA	<4.8	NA	NA	NA	NA	NA	NA	NA
KB-40	8/26/2002	2-4	326762	NA	NA	NA	NA	NA	NA	789 NA	NA	NA	NA	NA	NA	NA	NA
KB-40	8/26/2002	4-6	326763	NA	NA	NA	NA	NA	NA	34,000 NA	NA	NA	NA	NA	NA	NA	NA
KB-40	8/26/2002	6-8	326764	NA	NA	NA	NA	NA	NA	80 NA	NA	NA	NA	NA	NA	NA	NA
KB-44	8/26/2002	2-4	326771	NA	NA	NA	NA	NA	NA	25.1 NA	NA	NA	NA	NA	NA	NA	NA
KB-44	8/26/2002	4-6	326772	NA	NA	NA	NA	NA	NA	167 NA	NA	NA	NA	NA	NA	NA	NA
KB-45	8/26/2002	2-4	326774	NA	NA	NA	NA	NA	NA	<8.5	NA	NA	NA	NA	NA	NA	NA
KB-45	8/26/2002	4-6	326775	NA	NA	NA	NA	NA	NA	32 NA	NA	NA	NA	NA	NA	NA	NA
KB-45	8/26/2002	6-8	326776	NA	NA	NA	NA	NA	NA	<8.6	NA	NA	NA	NA	NA	NA	NA
KB-46	8/26/2002	2-4	326768	NA	NA	NA	NA	NA	NA	142 NA	NA	NA	NA	NA	NA	NA	NA
KB-46	8/26/2002	4-6	326769	NA	NA	NA	NA	NA	NA	57.4 NA	NA	NA	NA	NA	NA	NA	NA
KB-46	8/26/2002	6-8	326770	NA	NA	NA	NA	NA	NA	104 NA	NA	NA	NA	NA	NA	NA	NA
KB-46	8/27/2002	10-12	326932	NA	NA	NA	NA	NA	NA	<8.6	NA	NA	NA	NA	NA	NA	NA
KB-47	8/26/2002	2-4	326765	NA	NA	NA	NA	NA	NA	782 NA	NA	NA	NA	NA	NA	NA	NA
KB-47	8/26/2002	4-6	326766	NA	NA	NA	NA	NA	NA	33.3 NA	NA	NA	NA	NA	NA	NA	NA
KB-47	8/26/2002	6-8	326767	NA	NA	NA	NA	NA	NA	<8.4	NA	NA	NA	NA	NA	NA	NA
Tier II Residential Cleanup Goals Subsurface Soil ⁽¹⁾				NA	438	10,000	118,605	730	7,300	54,000 ⁽³⁾	400 ⁽¹⁾	87.6	10,000	7,300	7,300	NA	10,000
Tier II Non-Residential Cleanup Goals Subsurface Soil ⁽¹⁾				NA	438	10,000	118.6	730	7,300	54,000 ⁽³⁾	1,000 ⁽³⁾	87.6	10,000	7,300	7,300	NA	10,000
Common Background Ranges ⁽²⁾				NA	1.0 - 40	100 - 3,500	NA	0.01 - 70	5.0 - 3,000	NA	2 - 200	0.01 - 4.15	NA	0.1 - 2.0	0.1 - 50	NA	NA

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

mg/kg = milligrams per kilogram

NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F: Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Source: James Diagen. The Soil Chemistry of Hazardous Materials Table 3.1

Native Soil Concentration of Various Elements: p.229, 1998.

⁽³⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 7c - Subsurface Soil - Metals
Page 1 of 2

Table 7c
Subsurface Soil Analytical Results for Metals (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 28-29E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Total Lead	Total Mercury	Nickel	Selenium	Silver	Total Thallium	Total Zinc
KB-1	5/1/2001	2-4	291956	NA	NA	NA	NA	6.1	240	NA	10,000	NA	NA	NA	NA	NA	NA
KB-1	5/1/2001	4-6	291957	NA	NA	NA	NA	2.6	16	NA	280	NA	NA	NA	NA	NA	NA
KB-12	5/1/2001	5-6	291958	NA	NA	NA	NA	8.3	27	NA	840	NA	NA	NA	NA	NA	NA
KB-13	5/1/2001	4-6	291959	NA	NA	NA	NA	5.1	21	NA	800	NA	NA	NA	NA	NA	NA
KB-14	5/1/2001	4-6	291960	NA	NA	NA	NA	<0.62	17	NA	11	NA	NA	NA	NA	NA	NA
KB-14	5/1/2001	13.5-14	291961	NA	NA	NA	NA	1.3	27	NA	1,500	NA	NA	NA	NA	NA	NA
KB-15	5/1/2001	4-6	291962	NA	NA	NA	NA	<0.61	16	NA	26	NA	NA	NA	NA	NA	NA
KB-16	5/1/2001	3-4	291963	NA	NA	NA	NA	1,200	640	NA	9,300	NA	NA	NA	NA	NA	NA
KB-16	5/1/2001	4-6	291964	NA	NA	NA	NA	1.7	15	NA	11	NA	NA	NA	NA	NA	NA
KB-17	5/1/2001	2-4	291965	NA	NA	NA	NA	<0.60	18	NA	11	NA	NA	NA	NA	NA	NA
KB-18	5/1/2001	2-4	291966	NA	NA	NA	NA	<0.60	13	NA	5	NA	NA	NA	NA	NA	NA
KB-19	5/1/2001	2-4	291967	NA	NA	NA	NA	<0.60	14	NA	<4.8	NA	NA	NA	NA	NA	NA
KB-112	5/1/2001	2-4	291968	NA	NA	NA	NA	1.7	10	NA	58	NA	NA	NA	NA	NA	NA
KB-113	5/1/2001	2-4	293161	NA	NA	NA	NA	<0.57	11	NA	13	NA	NA	NA	NA	NA	NA
KB-14	5/1/2001	2-4	293309	NA	NA	NA	NA	<0.65	26	NA	<52	NA	NA	NA	NA	NA	NA
KB-15	5/1/2001	2-4	293164	NA	NA	NA	NA	<0.59	11	NA	<4.7	NA	NA	NA	NA	NA	NA
KB-116	5/1/2001	2-4	293169	NA	NA	NA	NA	<0.59	13	NA	<4.7	NA	NA	NA	NA	NA	NA
KB-17	5/1/2001	2-4	293310	NA	NA	NA	NA	<0.60	17	NA	<4.8	NA	NA	NA	NA	NA	NA
KB-17 Dup.	5/1/2001	2-4	293311	NA	NA	NA	NA	1.2	16	NA	<4.7	NA	NA	NA	NA	NA	NA
KB-118	5/1/2001	2-4	293314	NA	NA	NA	NA	<0.60	18	NA	<4.8	NA	NA	NA	NA	NA	NA
KB-118 Dup.	5/1/2001	2-4	293315	NA	NA	NA	NA	<0.59	16	NA	<4.7	NA	NA	NA	NA	NA	NA
KB-119	5/1/2001	2-4	293316	NA	NA	NA	NA	<0.60	20	NA	<4.8	NA	NA	NA	NA	NA	NA
MW10-1	03/1994	10-12	NA	NA	3.4	<11	NA	<1	6	NA	4.3	0.1	NA	2.1	<1	NA	NA
SB10-1	03/1994	2-4	NA	NA	8.4	290	NA	8	39	NA	1,000	0.1	NA	1.6	<1	NA	NA
SB10-2	03/1994	6-8	NA	NA	4.6	19	NA	<1	6	NA	9.4	<1	NA	2.1	<1	NA	NA
SB10-3	03/1994	4-6	NA	NA	3.6	25	NA	<1	9	NA	5.4	0.1	NA	2.3	<1	NA	NA
SB10-4	03/1994	6-8	NA	NA	7.2	83	NA	<1	22	NA	13	<0.1	NA	<0.6	<1	NA	NA
SB10-5	03/1994	14-16	NA	NA	2.1	<11	NA	<1	4	NA	3.9	<0.1	NA	3.3	<1	NA	NA
Tier II Residential Cleanup Goals Subsurface Soil ⁽¹⁾																	
				NA	438	10,000	118,605	730	7,300	54,000 ⁽³⁾	400 ⁽³⁾	87.6	10,000	7,300	7,300	NA	10,000
Tier II Non-Residential Cleanup Goals Subsurface Soil ⁽¹⁾																	
				NA	438	10,000	118.6	730	7,300	54,000 ⁽³⁾	1,000 ⁽³⁾	87.6	10,000	7,300	7,300	NA	10,000
Common Background Ranges ⁽²⁾																	
				NA	1.0 - 40	100 - 3,500	NA	0.01 - 70	15.0 - 3,000	NA	2 - 200	0.01 - 4.15	NA	0.1 - 2.0	0.1 - 50	NA	NA

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

Samples analyzed using EPA Method Series 6000/7000

mg/kg = milligrams per kilogram NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Source: James Dragan, The Soil Chemistry of Hazardous Materials Table 3.1

Native Soil Concentration of Various Elements: p.226, 1998.

⁽³⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 8a
Geoprobe Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Acetone	Acrolein	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane
HP-1	9/6/1995	7	W5090064-05	<20	NA	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0
KB-1W	3/1/2000	10-15	260548	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
KB-2W	3/1/2000	16-20	260549	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
KB-3W	3/1/2000	19-23	260550	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
KB-4W	3/3/2000	32-36	261735	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
KB-5W	3/6/2000	32-36	261736	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
KB-6W	3/3/2000	22.5-26.5	261737	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
KB-7W	4/6/2000	33-36	263438	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
KB-8W	4/14/2000	31-35	50526177	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
KB-9W	4/14/2000	35-40	50526185	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
KB-10W	4/5/2000	22-25	263430	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
KB-11W	4/5/2000	21-24	263431	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
KB-12W	4/5/2000	17-20	263432	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
KB-13W	4/6/2000	14-17	263433	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
KB-14W	4/6/2000	15-18	263435	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
KB-15W	4/6/2000	16-19	263436	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
KB-15W Dup.	4/6/2000	16-19	263437	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
KB-16W	5/3/2000	29-34	50548940	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
KB-17W	5/3/2000	24.5-29.5	50548932	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
KB-18W	7/11/2000	44-48	270499	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
KB-19W	7/11/2000	20-24	270500	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
KB-19W	7/11/2000	44-48	270501	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				3,040	NA	NA	5	NA	NA	0.289 ⁽²⁾	NA	NA	64 ⁽²⁾	64 ⁽²⁾	64 ⁽²⁾	1,060 ⁽²⁾	NA	112 ⁽²⁾	NA	23,161
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				10,220	NA	NA	98.6	NA	NA	46.1 ⁽²⁾	NA	NA	1,020 ⁽²⁾	1,020 ⁽²⁾	1,020 ⁽²⁾	10,200 ⁽²⁾	NA	2,040 ⁽²⁾	NA	NA

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organics Samples analyzed using EPA SW-846 Method 8260

µg/L = micrograms per liter

NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 8a - Geoprobe Groundwater - VOCs
Page 1 of 15

Table 8a
Geoprobe Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Acetone	Acrolein	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane
KB-20W	7/12/2000	20-24	270502	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.
KB-20W	7/12/2000	31-35	270503	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.
KB-21W	7/13/2000	30-34	270752	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.
KB-22W	7/13/2000	26-30	270753	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.
KB-23W	7/14/2000	18-22	270754	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.
KB-23W	7/14/2000	26-30	270755	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.
KB-24W	7/17/2000	32-36	271017	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.
KB-25W	7/18/2000	32-36	271018	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.
KB-26W	7/18/2000	20-24	271020	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.
KB-26W	7/18/2000	32-36	271019	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.
KB-27W	7/24/2000	28-32	271397	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.
KB-39W	8/27/2002	20-24	326931	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0
KB-48W	8/29/2003	12-17	874746	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0
KB-49W	8/29/2003	18-22	874747	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				3,040	NA	NA	5	NA	NA	0.289 ⁽²⁾	NA	NA	64 ⁽²⁾	64 ⁽²⁾	64 ⁽²⁾	1,060 ⁽²⁾	NA	112 ⁽²⁾	NA	23,161
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				10,220	NA	NA	98.6	NA	NA	46.1 ⁽²⁾	NA	NA	1,020 ⁽²⁾	1,020 ⁽²⁾	1,020 ⁽²⁾	10,200 ⁽²⁾	NA	2,040 ⁽²⁾	NA	NA

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds

Samples analyzed using EPA SW-846 Method 8260

µg/L = micrograms per liter

NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 8a - Geoprobe Groundwater - VOCs
Page 2 of 15

Table 8a
Geoprobe Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Acetone	Acrolein	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane
KB-50W	8/29/2003	20-24	874748	<50.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0
KB-51W	8/29/2003	15-20	874744	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0
KB-51W Dup	8/29/2003	15-20	874745	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0
KB-42W	5/1/2001	13-17	291969	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.
KB-112W	5/1/2001	13-17	291970	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.
KB-114W	5/16/2001	13-18	293162	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.
KB-115W	5/16/2001	13-18	293167	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.
KB-117W	5/18/2001	14-19	293320	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.
KB-117 Dup.	5/18/2001	14-19	293322	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.
STA-GW	3/2/2000	NA	260553	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.
STB-GW	3/2/2000	NA	260555	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.
STC-GW	3/2/2000	NA	260557	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.
STD-GW	3/2/2000	NA	260559	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.
STE-GW	3/2/2000	NA	260561	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.
TRIP	8/29/2003		874749	<20.0	<50.0	<50.0	<1.0	<1.0	1.2	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				3,040	NA	NA	5	NA	NA	0.289 ⁽²⁾	NA	NA	64 ⁽³⁾	64 ⁽³⁾	64 ⁽³⁾	1,060 ⁽²⁾	NA	112 ⁽³⁾	NA	25,161
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				10,220	NA	NA	98.6	NA	NA	46.1 ⁽²⁾	NA	NA	1,020 ⁽³⁾	1,020 ⁽³⁾	1,020 ⁽³⁾	10,200 ⁽²⁾	NA	2,040 ⁽³⁾	NA	NA

Detect compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detect compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detect compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organics. Samples analyzed using EPA SW-846 Method 8260

Samples analyzed using EPA SW-846 Method 8260

µg/L = micrograms per liter

NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 8a
Geoprobe Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Chloroform	Chloromethane	2-Chlorotoluene	4-Chlorotoluene	2-Chloroethyl vinyl ether	1,2-Dibromo-3-chloropropane	1,2-Dibromomethane (E/D)	Dibromomethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	trans-1,4-Dichloro-2-butene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethene
HP-1	9/6/1995	7	W5090064-05	<5.0	<10	NA	NA	<10	NA	NA	NA	<10	<10	<10	NA	NA	<5.0	<5.0	<5.0	3,900
KB-1W	3/12/2000	10-15	260548	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	750
KB-2W	3/12/2000	16-20	260549	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	11
KB-3W	3/12/2000	19-23	260550	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0
KB-4W	3/12/2000	32-36	261735	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	570
KB-5W	3/12/2000	32-36	261736	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	170
KB-6W	3/12/2000	22.5-26.5	261737	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0
KB-7W	4/6/2000	33-36	263438	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	8.8
KB-8W	4/14/2000	31-35	50526177	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<100	<5	<5	10	5,600
KB-9W	4/14/2000	35-40	50526185	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<100	<5	<5	<5	<5
KB-10W	4/5/2000	22-25	263430	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0
KB-11W	4/5/2000	21-24	263431	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0
KB-12W	4/5/2000	17-20	263432	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0
KB-13W	4/6/2000	14-17	263433	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0
KB-14W	4/6/2000	15-18	263435	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0
KB-15W	4/6/2000	16-19	263436	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	21
KB-15W Dup.	4/6/2000	16-19	263437	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	33
KB-16W	5/3/2000	29-34	50548940	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<100	<5	<5	<5	300
KB-17W	5/3/2000	24.5-29.5	50548932	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<100	<5	<5	<5	<5
KB-18W	7/11/2000	44-48	270499	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0
KB-19W	7/11/2000	20-24	270500	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0
KB-19W	7/11/2000	44-48	270501	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				100	NA	NA	NA	NA	NA	NA	NA	600	600	75	NA	NA	640	5	7	70
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				468.9	NA	NA	NA	NA	NA	NA	NA	9,198	NA	119.2	NA	NA	10,220	31.4	7	1,022

Detect compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detect compound exceeds the VRP Tier II Residential Cleanup Goal

Detect compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic
Samples analyzed using EPA SW-846 Method 8260
µg/L = micrograms per liter

NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F: Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 8a
Geoprobe Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Chloroform	Chloroethane	2-Chlorotoluene	4-Chlorotoluene	2-Chloroethyl vinyl ether	1,2-Dibromo-3-chloropropane	1,2-Dibromomethane (EDB)	Dibromomethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	trans-1,4-Dichloro-2-butene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene
KB-20W	7/12/2000	20-24	270502	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	21
KB-20W	7/12/2000	31-35	270503	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	116
KB-21W	7/13/2000	30-34	270752	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	99
KB-22W	7/13/2000	26-30	270753	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	9.4
KB-23W	7/14/2000	18-22	270754	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	71
KB-23W	7/14/2000	26-30	270755	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0
KB-24W	7/17/2000	32-36	271017	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0
KB-25W	7/18/2000	32-36	271018	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0
KB-26W	7/18/2000	20-24	271020	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	160
KB-26W	7/18/2000	32-36	271019	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0
KB-27W	7/24/2000	28-32	271397	<20	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0
KB-39W	8/27/2002	20-24	326931	<1.0	<5.0	<1.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
KB-48W	8/29/2003	12-17	874745	<1.0	<5.0	<1.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
KB-49W	8/29/2003	18-22	874747	<1.0	<5.0	<1.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
Tier II Residential Cleanup Goals - Groundwater ¹¹⁾				100	NA	NA	NA	NA	NA	NA	NA	600	600	75	NA	NA	640	5	7	70
Tier II Non-Residential Cleanup Goals - Groundwater ¹²⁾				468.9	NA	NA	NA	NA	NA	NA	NA	9,198	NA	119.2	NA	NA	10,220	31.4	7	1,022

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic

Samples analyzed using EPA SW-846 Method 8260

µg/L = micrograms per liter

NA = Not Applicable

¹¹⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Response, July 1996.

¹²⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 8a
Geoprobe Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Chloroform	Chloromethane	2-Chlorotoluene	4-Chlorotoluene	2-Chloroethyl vinyl ether	1,2-Dibromo-3-chloropropane	1,2-Dibromomethane (EDB)	Dibromomethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	trans-1,4-Dichloro-2-butene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene
KB-50W	8/29/2003	20-24	874748	<1.0	<5.0	<1.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
KB-51W	8/29/2003	15-20	874744	<1.0	<5.0	<1.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	2.5	1,180
KB-51W Dup	8/29/2003	15-20	874745	<1.0	<5.0	<1.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	2.5	1,200
KB-12W	5/1/2001	13-17	291969	<2.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0
KB-112W	5/1/2001	13-17	291970	<2.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0
KB-114W	5/16/2001	13-18	293162	<2.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0
KB-115W	5/16/2001	13-18	293167	<2.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0
KB-117W	5/18/2001	14-19	293320	<2.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0
KB-117 Dup.	5/18/2001	14-19	293322	<2.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0
STA-GW	3/2/2000	NA	260553	<2.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0
STB-GW	3/2/2000	NA	260555	<2.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0
STC-GW	3/2/2000	NA	260557	<2.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0
STD-GW	3/2/2000	NA	260559	<2.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0
STB-GW	3/2/2000	NA	260561	<2.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0
TRIP	8/29/2003		874749	<1.0	<5.0	<1.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				100	NA	NA	NA	NA	NA	NA	NA	600	600	75	NA	NA	640	5	7	70
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				468.9	NA	NA	NA	NA	NA	NA	NA	9,198	NA	119.2	NA	NA	10,220	31.4	7	1,022

Detect compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detect compound exceeds the VRP Tier II Residential Cleanup Goal

Detect compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organics Samples analyzed using EPA SW-846 Method 8260

Samples analyzed using EPA SW-846 Method 8260

µg/L = micrograms per liter

NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 8a
Geoprobe Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	trans-1,2-Dichloroethene	1,2-Dichloropropane	1,3-Dichloropropane	2,2-Dichloropropane	1,1-Dichloropropene	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethyl Acetate	Ethylbenzene	Ethyl methylacrylate	2-Hexanone	Hexachlorobutadiene	Iodomethane	Isopropylbenzene	p-Isopropyltoluene	Methylene chloride
HP-1	9/6/1995	7	W5090264-05	12	<5.0	NA	NA	NA	<5.0	<5.0	NA	<5.0	NA	<20	NA	NA	NA	NA	<5.0
KB-1W	3/1/2000	10-15	260548	17	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-2W	3/1/2000	16-20	260549	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-3W	3/1/2000	19-23	260550	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-4W	3/3/2000	32-36	261735	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-5W	3/6/2000	32-36	261736	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-6W	3/3/2000	22.5-26.5	261737	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-7W	4/6/2000	33-36	263438	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-8W	4/14/2000	31-35	50525177	19	<5	<5	<5	<5	<5	<5	NA	<5	<100	<10	<5	<10	<5	<5	<5
KB-9W	4/14/2000	35-40	50525185	<5	<5	<5	<5	<5	<5	<5	NA	<5	<100	<10	<5	<10	<5	<5	<5
KB-10W	4/5/2000	22-25	263430	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-11W	4/5/2000	21-24	263431	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-12W	4/5/2000	17-20	263432	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-13W	4/6/2000	14-17	263433	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-14W	4/6/2000	15-18	263435	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-15W	4/6/2000	16-19	263436	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-15W Dup.	4/6/2000	16-19	263437	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-16W	5/3/2000	29-34	50548940	17	<5	<5	<5	<5	<5	<5	NA	<5	<100	<10	<5	<10	<5	<5	<5
KB-17W	5/3/2000	24.5-29.5	50548932	<5	<5	<5	<5	<5	<5	<5	NA	<5	<100	<10	<5	<10	<5	<5	<5
KB-18W	7/11/2000	44-48	270499	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-19W	7/11/2000	20-24	270500	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-19W	7/11/2000	44-48	270501	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				128 ⁽²⁾	NA	NA	NA	0.850 ⁽²⁾	NA	NA	NA	700	NA	NA	10	NA	689 ⁽²⁾	44.5 ⁽²⁾	6.30 ⁽²⁾
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				2,040 ⁽²⁾	NA	NA	NA	28.6 ⁽²⁾	NA	NA	NA	10,220	NA	NA	36.7	NA	10,200 ⁽²⁾	10,200 ⁽²⁾	381 ⁽²⁾

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organics - Samples analyzed using EPA SW-846 Method 8260

Samples analyzed using EPA SW-846 Method 8260

µg/L = micrograms per liter

NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 8a
Geoprobe Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	trans-1,2-Dichloroethene	1,2-Dichloropropane	1,3-Dichloropropane	2,2-Dichloropropane	1,1-Dichloropropene	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethyl Acetate	Ethylbenzene	Ethyl methacrylate	2-Hexanone	Hexachlorobutadiene	Iodomethane	Isopropylbenzene	p-Isopropyltoluene	Methylene chloride
KB-20W	7/12/2000	20-24	270502	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-20W	7/12/2000	31-35	270503	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-21W	7/13/2000	30-34	270752	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-22W	7/13/2000	26-30	270753	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-23W	7/14/2000	18-22	270754	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-23W	7/14/2000	26-30	270755	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-24W	7/17/2000	32-36	271017	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-25W	7/18/2000	32-36	271018	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-26W	7/18/2000	20-24	271020	5.5	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-26W	7/18/2000	32-36	271019	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-27W	7/24/2000	28-32	271397	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10
KB-39W	8/27/2002	20-24	326931	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	<1.0	<5.0	<12.5	<5.0	<5.0	<1.0	<1.0	<5.0
KB-43W	8/29/2003	12-17	874746	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	<1.0	<5.0	<12.5	<5.0	<5.0	<1.0	<1.0	<5.0
KB-49W	8/29/2003	18-22	874747	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	<1.0	<5.0	<12.5	<5.0	<5.0	<1.0	<1.0	<5.0
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				128 ⁽²⁾	NA	NA	NA	0.850 ⁽²⁾	NA	NA	NA	700	NA	NA	10	NA	689 ⁽²⁾	445 ⁽²⁾	6.30 ⁽²⁾
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				2,040 ⁽²⁾	NA	NA	NA	28.6 ⁽²⁾	NA	NA	NA	10,220	NA	NA	36.7	NA	10,200 ⁽²⁾	10,200 ⁽²⁾	38 ⁽²⁾

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds
Samples analyzed using EPA SW-846 Method 8260

µg/L = micrograms per liter

NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 8a
Geoprobe Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	trans-1,2-Dichloroethene	1,2-Dichloropropane	1,3-Dichloropropane	2,2-Dichloropropane	1,1-Dichloropropene	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethyl Acetate	Ethylbenzene	Ethyl methacrylate	2-Hexanone	Hexachlorobutadiene	Iodomethane	Isopropylbenzene	p-Isopropyltoluene	Methylene chloride
KB-50W	8/29/2003	20-24	874748	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<5.0	<12.5	<5.0	<5.0	<1.0	<1.0	<5.0
KB-51W	8/29/2003	15-20	874744	30.8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<5.0	<12.5	<5.0	<5.0	<1.0	<1.0	<5.0
KB-51W Dup	8/29/2003	15-20	874745	31.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<5.0	<12.5	<5.0	<5.0	<1.0	<1.0	<5.0
KB-12W	5/1/2001	13-17	291969	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<1.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0
KB-112W	5/1/2001	13-17	291970	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<1.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0
KB-114W	5/16/2001	13-18	293162	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<1.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0
KB-115W	5/16/2001	13-18	293167	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<1.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0
KB-117W	5/18/2001	14-19	293320	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<1.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0
KB-117 Dup.	5/18/2001	14-19	293322	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<1.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0
STA-GW	3/2/2000	NA	260553	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<1.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0
STB-GW	3/2/2000	NA	260555	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<1.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0
STC-GW	3/2/2000	NA	260557	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<1.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0
STD-GW	3/2/2000	NA	260559	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<1.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0
STE-GW	3/2/2000	NA	260561	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<1.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0
TRIP	8/29/2003		874749	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<5.0	<12.5	<5.0	<5.0	<1.0	<1.0	<5.0
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				1.28 ⁽²⁾	NA	NA	NA	0.85 ⁽²⁾	NA	NA	NA	700	NA	NA	10	NA	689 ⁽²⁾	445 ⁽²⁾	6.30 ⁽²⁾
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				2,040 ⁽²⁾	NA	NA	NA	28.6 ⁽²⁾	NA	NA	NA	10,220	NA	NA	36.7	NA	10,200 ⁽²⁾	10,200 ⁽²⁾	381 ⁽²⁾

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds
Samples analyzed using EPA SW-846 Method 8260

µg/L = micrograms per liter

NA = Not Applicable

(1) Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Response, July 1996.

(2) Calculated using surrogate toxicity values and Tier II equations.

Table 8a
Geoprobe Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Methyl-ethyl-ketone (MEK)	Methyl-tert-butyl ether (MTBE)	4-Methyl-2-pentanone (MIBK)	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane
HP-1	9/6/1995	7	W5090064-05	<20	NA	<20	NA	NA	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0
KB-1W	3/1/2000	10-15	260548	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
KB-2W	3/1/2000	16-20	260549	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
KB-3W	3/1/2000	19-23	260550	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
KB-4W	3/3/2000	32-36	261735	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
KB-5W	3/6/2000	32-36	261736	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
KB-6W	3/3/2000	22.5-26.5	261737	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
KB-7W	4/6/2000	33-36	263438	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
KB-8W	4/14/2000	31-35	50526177	<10	<5	<10	<5	<5	<5	<5	<5	<5	NA	<5	<5	<5	<5	<5
KB-9W	4/14/2000	35-40	50526185	<10	<5	<10	<5	<5	<5	<5	<5	<5	NA	<5	<5	<5	<5	<5
KB-10W	4/5/2000	22-25	263430	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
KB-11W	4/5/2000	21-24	263431	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
KB-12W	4/5/2000	17-20	263432	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
KB-13W	4/6/2000	14-17	263433	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
KB-14W	4/6/2000	15-18	263435	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
KB-15W	4/6/2000	16-19	263436	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
KB-15W Dup.	4/6/2000	16-19	263437	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
KB-16W	5/3/2000	29-34	50548940	<10	<5	<10	<5	<5	<5	<5	<5	<5	NA	<5	<5	<5	<5	<5
KB-17W	5/3/2000	24.5-29.5	50548932	<10	<5	<10	<5	<5	<5	<5	<5	<5	NA	<5	<5	<5	<5	<5
KB-18W	7/1/2000	44-48	270499	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
KB-19W	7/1/2000	20-24	270500	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
KB-19W	7/1/2000	44-48	270501	<5.0	<10.	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				917.72	45	1,520	1,216	64 ⁽²⁾	NA	5	5	5	5	1,000	NA	70	200	5
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				5,110	715	5,110	4,088	1,020 ⁽²⁾	NA	110	14.3	56.1	NA	20,440	NA	1,022	9,198	50.2

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organics Samples analyzed using EPA SW-846 Method 8260

µg/L = micrograms per liter

NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 8a - Geoprobe Groundwater - VOCs
Page 10 of 15

Table 8a
Geoprobe Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Methyl-ethyl-ketone (MEK)	Methyl-tert-butyl ether (MTBE)	4-Methyl-2-pentanone (MIBK)	Naphthalene	n-Propylbenzene	Styrene	1,1,2,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane
KB-20W	7/12/2000	20-24	270502	<50	<10	<50	<50	<50	<50	<50	<50	<50	NA	<50	<50	<50	<50	<50
KB-20W	7/12/2000	31-35	270503	<50	<10	<50	<50	<50	<50	<50	<50	<50	NA	<50	<50	<50	<50	<50
KB-21W	7/13/2000	30-34	270752	<50	<10	<50	<50	<50	<50	<50	<50	<50	NA	<50	<50	<50	<50	<50
KB-22W	7/13/2000	26-30	270753	<50	<10	<50	<50	<50	<50	<50	<50	<50	NA	<50	<50	<50	<50	<50
KB-23W	7/14/2000	18-22	270754	<50	<10	<50	<50	<50	<50	<50	<50	<50	20	<50	<50	<50	<50	<50
KB-23W	7/14/2000	26-30	270755	<50	<10	<50	<50	<50	<50	<50	<50	<50	NA	<50	<50	<50	<50	<50
KB-24W	7/17/2000	32-36	271017	<50	<10	<50	<50	<50	<50	<50	<50	<50	NA	<50	<50	<50	<50	<50
KB-25W	7/18/2000	32-36	271018	<50	<10	<50	<50	<50	<50	<50	<50	<50	NA	<50	<50	<50	<50	<50
KB-26W	7/18/2000	20-24	271020	<50	<10	<50	<50	<50	<50	<50	<50	<50	NA	<50	<50	<50	<50	<50
KB-26W	7/18/2000	32-36	271019	<50	<10	<50	<50	<50	<50	<50	<50	<50	NA	<50	<50	<50	<50	<50
KB-27W	7/24/2000	28-32	271397	<50	<10	<50	<50	<50	<50	<50	<50	<50	NA	<50	<50	<50	<50	<50
KB-39W	8/27/2002	20-24	326931	<12.5	<50	<12.5	<50	<10	<10	<10	<10	<10	NA	<10	<50	<50	<10	<10
KB-48W	8/29/2003	12-17	874746	<12.5	<50	<12.5	<50	<10	<10	<10	<10	<10	NA	<10	<50	<50	<10	<10
KB-49W	8/29/2003	18-22	874747	<12.5	<50	<12.5	<50	<10	<10	<10	<10	<10	NA	<10	<50	<50	<10	<10
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				917.72	45	1,520	1,216	64 ⁽²⁾	NA	5	5	5	5	1,000	NA	70	200	5
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				5,110	715	5,110	4,088	1,020 ⁽²⁾	NA	110	14.3	56.1	NA	20,440	NA	1,022	9,198	50.2

Tier II Non-Residential Cleanup Goals - Groundwater⁽¹⁾

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds. Samples analyzed using EPA SW-846 Method 8260

Samples analyzed using EPA SW-846 Method 8260

µg/L = micrograms per liter

NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 8a
Geoprobe Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Methyl-ethyl-ketone (MEK)	Methyl-tert-butyl ether (MTBE)	4-Methyl-2-pentanone (MIBK)	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane
KB-50W	8/29/2003	20-24	874748	<12.5	<5.0	<12.5	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<5.0	<5.0	<1.0	<1.0
KB-51W	8/29/2003	15-20	874744	<12.5	<5.0	<12.5	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<5.0	<5.0	<1.0	<1.0
KB-51W Dup	8/29/2003	15-20	874745	<12.5	<5.0	<12.5	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<5.0	<5.0	<1.0	<1.0
KB-i2W	5/1/2001	13-17	291969	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
KB-i2W	5/1/2001	13-17	291970	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
KB-i4W	5/16/2001	13-18	293162	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
KB-i4W	5/16/2001	13-18	293167	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
KB-i7W	5/18/2001	14-19	293320	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
KB-i7W Dup	5/18/2001	14-19	293322	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
STA-GW	3/2/2000	NA	260553	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
STB-GW	3/2/2000	NA	260555	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
STC-GW	3/2/2000	NA	260557	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
STD-GW	3/2/2000	NA	260559	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
STE-GW	3/2/2000	NA	260561	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
TRIP	8/29/2003		874749	<12.5	<5.0	<12.5	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<5.0	<5.0	<1.0	<1.0
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				917.72	45	1,520	1,216	64 ⁽²⁾	NA	5	5	5	5	1,000	NA	70	200	5
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				5,110	715	5,110	4,088	1,020 ⁽²⁾	NA	110	14.3	56.1	NA	20,440	NA	1,022	9,198	50.2

⁽¹⁾ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

⁽²⁾ Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds

Samples analyzed using EPA SW-846 Method 8260

µg/L = micrograms per liter

NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F: Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 8a
Geoprobe Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	Vinyl chloride	Xylenes, (Total)
HP-1	9/6/1995	7	W5090064-05	438 NA	NA	NA	NA	NA	<20	590	<5.0
KB-1W	3/1/2000	10-15	260548	1,300	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0
KB-2W	3/1/2000	16-20	260549	98	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0
KB-3W	3/1/2000	19-23	260550	64	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0
KB-4W	3/3/2000	32-36	261735	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	146	<5.0
KB-5W	3/6/2000	32-36	261736	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	23	<5.0
KB-6W	3/3/2000	22.5-26.5	261737	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0
KB-7W	4/6/2000	33-36	263438	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0
KB-8W	4/14/2000	31-35	50526177	<5	<5	<5	<5	<5	<10	640	<5
KB-9W	4/14/2000	35-40	50526185	<5	<5	<5	<5	<5	<10	15	<5
KB-10W	4/5/2000	22-25	263430	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0
KB-11W	4/5/2000	21-24	263431	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0
KB-12W	4/5/2000	17-20	263432	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0
KB-13W	4/6/2000	14-17	263433	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0
KB-14W	4/6/2000	15-18	263435	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0
KB-15W	4/6/2000	16-19	263436	100	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0
KB-15W Dup.	4/6/2000	16-19	263437	190	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0
KB-16W	5/3/2000	29-34	50548940	<5	<5	<5	<5	<5	<10	160	<5
KB-17W	5/3/2000	24.5-29.5	50548932	<5	<5	<5	<5	<5	<10	39	<5
KB-18W	7/11/2000	44-48	270499	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<2.0	<5.0
KB-19W	7/11/2000	20-24	270500	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<2.0	<5.0
KB-19W	7/11/2000	44-48	270501	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<2.0	<5.0
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾											
				5	1,380 ⁽²⁾	NA	13,7 ⁽²⁾	13,7 ⁽²⁾	NA	2	10,000
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾											
				260	30,700 ⁽²⁾	NA	5,110 ⁽²⁾	5,110 ⁽²⁾	NA	10	204,400

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic - Samples analyzed using EPA SW-846 Method 8260

Samples analyzed using EPA SW-846 Method 8260

µg/L = micrograms per liter

NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 8a
Geoprobe Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	Vinyl chloride	Xylenes, (Total)
KE-20W	7/12/2000	20-24	270502	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	18	<5.0
KE-20W	7/12/2000	31-35	270503	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	97	<5.0
KE-21W	7/13/2000	30-34	270752	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	310	<5.0
KE-22W	7/13/2000	26-30	270753	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<2.0	<5.0
KE-23W	7/14/2000	18-22	270754	7.2	<5.0	<5.0	<5.0	<5.0	<10.	11	<5.0
KE-23W	7/14/2000	26-30	270755	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<2.0	<5.0
KE-24W	7/17/2000	32-36	271017	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	29	<5.0
KE-25W	7/18/2000	32-36	271018	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	3	<5.0
KE-26W	7/18/2000	20-24	271020	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	20	<5.0
KE-26W	7/18/2000	32-36	271019	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	53	<5.0
KE-27W	7/24/2000	28-32	271397	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<2.0	<5.0
KE-39W	8/27/2002	20-24	326931	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0
KE-48W	8/29/2003	12-17	874746	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0
KE-49W	8/29/2003	18-22	874747	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				5	1,380 ⁽²⁾	NA	13,7 ⁽²⁾	13,7 ⁽²⁾	NA	2	10,000
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				260	30,700 ⁽²⁾	NA	5,110 ⁽²⁾	5,110 ⁽²⁾	NA	10	204,400

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic - Samples analyzed using EPA SW-846 Method 8260

Samples analyzed using EPA SW-846 Method 8260

µg/L = micrograms per liter

NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 8a
Geoprobe Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	Vinyl chloride	Xylenes, (Total)
KB-50W	8/29/2003	20-24	874748	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0
KB-51W	8/29/2003	15-20	874744	159	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0
KB-51W Dup	8/29/2003	15-20	874745	171	<1.0	<5.0	<1.0	<1.0	<5.0	4.8	<1.0
KB-12W	5/17/2001	13-17	291969	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<5.0
KB-112W	5/17/2001	13-17	291970	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<5.0
KB-114W	5/16/2001	13-18	293162	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<5.0
KB-115W	5/16/2001	13-18	293167	44	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<5.0
KB-117W	5/18/2001	14-19	293320	150	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<5.0
KB-117 Dup.	5/18/2001	14-19	293322	170	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<5.0
STA-GW	3/2/2000	NA	260553	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
STB-GW	3/2/2000	NA	260555	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
STC-GW	3/2/2000	NA	260557	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
STD-GW	3/2/2000	NA	260559	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
STE-GW	3/2/2000	NA	260561	19	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
TRIP	8/29/2003		874749	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾											
				5	1,380 ⁽²⁾	NA	13.7 ⁽²⁾	13.7 ⁽²⁾	NA	2	10,000
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾											
				260	30,700 ⁽²⁾	NA	5,110 ⁽²⁾	5,110 ⁽²⁾	NA	10	204,400

Detect compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detect compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detect compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds

Samples analyzed using EPA SW-846 Method 8260

µg/L = micrograms per liter

NA = Not Applicable

(1) Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Response, July 1996.

(2) Calculated using surrogate toxicity values and Tier II equations.

Table 8b
Geoprobe Groundwater Analytical Results for PAHs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (ghi) perylene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
KB-48W	8/29/2003	12-17	874746	<1.00	<1.00	<1.00	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<1.00	<0.20	<2.00	<1.00	<0.9
KB-49W	8/29/2003	18-22	874747	<1.00	<1.00	<1.00	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<1.00	<0.20	<2.00	<1.00	<0.20
KB-50W	8/29/2003	20-24	874748	<1.00	<1.00	<1.00	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<1.00	<0.20	<2.00	<1.00	<0.20
KB-51W	8/29/2003	15-20	874744	<1.00	<1.00	<1.00	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<1.00	<0.20	<2.00	<1.00	<0.20
KB-51W Dup	8/29/2003	15-20	874745	<1.00	<1.00	<1.00	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<1.00	<0.20	<2.00	<1.00	<0.20
KB-42W	5/1/2001	13-17	291969	<18	<10	<6.6	<0.10	<0.20	<0.18	<0.76	<0.17	<0.20	<0.10	<2.1	<2.1	<0.20	<8.0	<6.4	<2.7
KB-412W	5/1/2001	13-17	291970	<18	<10	<6.6	<0.10	<0.20	<0.18	<0.76	<0.17	<0.20	<0.10	<2.1	<2.1	<0.20	<8.0	<6.4	<2.7
KB-414W	5/16/2001	13-18	293162	<18	<10	<6.6	<0.10	<0.20	<0.18	<0.76	<0.17	<0.20	<0.10	<2.1	<2.1	<0.20	<8.0	<6.4	<2.7
KB-415W	5/16/2001	13-18	293167	<18	<10	<6.6	<0.10	<0.20	<0.18	<0.76	<0.17	<0.20	<0.10	<2.1	<2.1	<0.20	<8.0	<6.4	<2.7
KB-417	5/18/2001	14-19	293320	<18	<10	<6.6	<0.10	<0.20	<0.18	<0.76	<0.17	<0.20	<0.10	<2.1	<2.1	<0.20	<8.0	<6.4	<2.7
KB-417 Dup.	5/18/2001	14-19	293322	<18	<10	<6.6	<0.10	<0.20	<0.18	<0.76	<0.17	<0.20	<0.10	<2.1	<2.1	<0.20	<8.0	<6.4	<2.7
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				1,824	6,89 ⁽²⁾	9,120	0.10	0.20	0.20	38.4 ⁽¹⁾	0.20	0.20	0.30	243.2	1,216	0.40	1,216	230 ⁽³⁾	912
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				6,132	2,040 ⁽²⁾	30,660	10	10	10	613 ⁽²⁾	39.2	391.8	10	817.6	4,088	10	4,088	230 ⁽³⁾	3,066

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

PAHs = Polynuclear Aromatic Hydrocarbons

Samples analyzed using EPA SW-846 Method 8310

µg/L = micrograms per liter

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F: Tier II Cleanup Goals-Human

Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

⁽³⁾ Tier I Health Protective Levels for Phenanthrene

Technical Memo by Indiana Voluntary Remediation Program, dated 4/21/98
The given value is a residential cleanup goal (non-residential cleanup goal is not available).

Table 8c
 Geoprobe Groundwater Analytical Results for Metals (ug/L)
 Former General Motors Corporation
 Allison Gas Turbine Division, Plant 10
 Indianapolis, Indiana
 IDEM VRP #6991004
 KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Total Cadmium	Total Chromium	Total Lead
KB-i2W	5/1/2001	13-17	291969	<5.	<40.	<5.
KB-i12W	5/1/2001	13-17	291970	<5.	<40.	<5.
KB-i14W	5/16/2001	13-18	293162	<5.	<40.	<5.
KB-i15W	5/16/2001	13-18	293167	<5.	<40.	9.8
KB-i17	5/18/2001	14-19	293320	<5.	<40.	10.1
KB-i17 Dup.	5/18/2001	14-19	293322	<5.	<40.	<5.
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				5.0	100	15 ⁽²⁾
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				51.1	511	15 ⁽²⁾
Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal						
Detected compound exceeds the VRP Tier II Residential Cleanup Goal						
Detected compound is below the VRP Tier II Residential Cleanup Goal						

Samples analyzed using EPA Method Series 6000/7000

µg/L = micrograms per liter

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ IDEM VRP Interoffice Memo dated on January 26, 1998.

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991094
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Acetone	Acrolein	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromonethane	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	2-Chlorotoluene	4-Chlorotoluene
MW-1	3/3/2004	10.5-15.5	503207557	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-2	3/3/2004	12-17	503207565	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10-1	3/28/1994	7-17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-10-1	10/5/1994	7-17	W57019113	<20	NA	NA	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-10-1	7/14/1995	7-17	W702007401	<20	NA	NA	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-10-1	2/5/1997	7-17	W702007401	<20	NA	NA	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-10-1 Dup	11/23/1999	7-17	253788	<50	<250	<250	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1	11/23/1999	7-17	253812	<50	<250	<250	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1	2/29/2000	7-17	260586	<50	<250	<250	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1	7/19/2002	7-17	260586	<50	<250	<250	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1 Dup	7/19/2002	7-17	324157	<50	<250	<250	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1	5/7/2003	7-17	324158	<50	<250	<250	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1	8/22/2003	7-17	842918	<200	<500	<500	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
MW-10-1	8/22/2003	7-17	872595	<200	<500	<500	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
MW-10-1	12/3/2003	7-17	503002115	<100	<100	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1	12/3/2003	7-17	503002115	<100	<100	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1	3/11/2004	7-17	503237240	<100	<100	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1	3/11/2004	7-17	503237257	<100	<100	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1	6/4/2004	7-17	503492829	<100	<100	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1	6/4/2004	7-17	503492928	<100	<100	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-132	9/1992	10-20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-132	5/27/1993	10-20	69681	<400	<1000	<1000	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
MW-132	7/14/1993	10-20	W507019109	<20	NA	NA	<50	NA	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-132	2/5/1997	10-20	W702007403	<500	NA	NA	<120	<120	<120	<120	<120	<120	<120	<120	<120	<120	<120	<120	<120	<120	<120	<120	<120	<120
MW-132	11/23/1999	10-20	253791	<50	<250	<250	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-132	2/28/2000	10-20	260589	<50	<250	<250	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-132	7/22/2002	10-20	324190	<50	<250	<250	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-132	5/7/2003	10-20	842913	<200	<500	<500	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
MW-132	8/22/2003	10-20	842913	<200	<500	<500	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
MW-132	8/22/2003	10-20	872597	<200	<500	<500	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
MW-132	12/3/2003	10-20	503002123	<100	<100	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-132	12/3/2003	10-20	503002123	<100	<100	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-132	3/11/2004	10-20	503237166	<100	<100	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-132	6/4/2004	10-20	503492647	<100	<100	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-133	9/1992	8-18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-133	5/27/1993	8-18	69680	<20	<50	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
MW-133	9/11/1995	8-18	W5060013401	<20	NA	NA	<50	NA	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-133	2/5/1997	8-18	W702007403	<20	NA	NA	<50	NA	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-133	11/23/1999	8-18	253798	<50	<250	<250	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-133	2/28/2000	8-18	260586	<50	<250	<250	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-133R	12/3/2003	8-18	503002131	<100	<100	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-133R	12/3/2003	8-18	503002131	<100	<100	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-133R	3/11/2004	8-18	503237208	<100	<100	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-133R	6/4/2004	8-18	503492704	<100	<100	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50

Tier II Residential Cleanup Goals - Groundwater¹³

Tier II Non-Residential Cleanup Goals - Groundwater¹⁴

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

See last page for footnotes

Table 9a - Shallow Monitoring Well Groundwater - VOCs
Page 1 of 32

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6591004
KERAMIDA Project No. 2229E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Acetone	Acrolein	Acrylonitrile	Benzene	Bromobenzene	Bromochloroethane	Bromoforn	Bromomethane	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	2-Chlorotoluene	4-Chlorotoluene
MW-135	9/19/92	10-20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-135	9/19/92	10-20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-135	5/27/1993	10-20	66679	<20	<50	<50	<1.0	NA	NA	<1.0	<5.0	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
MW-135	7/14/1995	10-20	W5070191.14	<20	NA	NA	<5.0	NA	NA	<5.0	<10	NA	NA	NA	NA	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA
MW-135	2/25/1997	10-20	W7020074.04	<20	NA	NA	<5.0	NA	NA	<5.0	<10	NA	NA	NA	NA	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA
MW-135	1/23/1999	10-20	253800	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-135	2/29/2000	10-20	260574	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-135	11/8/2000	10-20	260551	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-135	6/20/2001	10-20	290593	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-135	7/15/2002	10-20	324015	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-135	12/04/2003	10-20	503002.149	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-145	6/4/1993	17.5-27.5	69941	<100	<200	<200	<5	NA	NA	<5	<20	NA	NA	NA	<5	<5	<5	<5	<50	<5	<50	NA	NA
MW-145	7/14/1995	17.5-27.5	W5070191.10	<20	NA	NA	<5.0	NA	NA	<5.0	<10	NA	NA	NA	NA	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA
MW-145	2/25/1997	17.5-27.5	W7020074.05	<20	NA	NA	<5.0	NA	NA	<5.0	<10	NA	NA	NA	NA	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA
MW-145	1/23/1999	17.5-27.5	253799	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-145 Dup	1/23/1999	17.5-27.5	253813	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-145	2/29/2000	17.5-27.5	260597	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-145	11/8/2000	17.5-27.5	260652	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-145	6/21/2001	17.5-27.5	290618	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-145	7/22/2002	17.5-27.5	324184	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-145	12/04/2003	17.5-27.5	503002.553	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-146	6/4/1993	15-25	69942	<20	<50	<50	<1.0	NA	NA	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	NA	NA
MW-146	7/14/1995	15-25	W5070191.11	<20	NA	NA	<5.0	NA	NA	<5.0	<10	NA	NA	NA	NA	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA
MW-146	2/25/1997	15-25	W7020074.06	<20	NA	NA	<5.0	NA	NA	<5.0	<10	NA	NA	NA	NA	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA
MW-146	1/23/1999	15-25	253800	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	NA	NA
MW-146	2/29/2000	15-25	260572	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-146	11/8/2000	15-25	260684	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-146	6/21/2001	15-25	290619	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-146	7/15/2002	15-25	324017	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-146	3/11/2004	15-25	503002.461	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-146	7/15/2002	15-25	503002.716	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-146	6/4/2004	15-25	503492.738	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-147	6/4/1993	20-30	69943	<20	<50	<50	<1.0	NA	NA	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	NA	NA
MW-147	7/14/1995	20-30	W5070191.08	<20	NA	NA	<5.0	NA	NA	<5.0	<10	NA	NA	NA	NA	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA
MW-147	2/25/1997	20-30	W7020074.07	<20	NA	NA	<5.0	NA	NA	<5.0	<10	NA	NA	NA	NA	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA
MW-147	1/23/1999	20-30	253799	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-147	2/28/2000	20-30	260588	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-147	11/8/2000	20-30	260685	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-147	6/21/2001	20-30	290609	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0

Tier II Residential Cleanup Goals - Groundwater¹⁷Tier II Non-Residential Cleanup Goals - Groundwater¹⁷

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is not on the VRP Tier II Residential Cleanup Goal

See last page for footnotes

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Acetone	Acrolein	Acrylonitrile	Benzene	Bromobenzene	Bromochloroethane	Bromodichloroethane	Bromoform	Bromomethane	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorobromomethane	Chloroethane	Chloroform	Chloromethane	2-Chlorotoluene	4-Chlorotoluene
MW-147A	7/22/2002	20-30	324189	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-147A	5/7/2003	20-30	845912	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-147A	8/22/2003	20-30	872508	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-147A	12/05/2003	20-30	503002578	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-147A	9/11/2004	20-30	50337158	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-147A	6/4/2004	20-30	503492597	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-148	6/4/1993	10.5-25.5	69944	<1,600	<4,000	<4,000	<80	NA	NA	NA	<80	<800	NA	NA	NA	<80	<80	<80	<80	<800	<80	<800	NA	NA
MW-148	7/14/1995	10.5-25.5	W7070191	<20	NA	NA	<5.0	NA	NA	NA	<5.0	<5.0	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA
MW-148	2/5/1997	10.5-25.5	W7020074	<48	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA
MW-148	11/25/1999	10.5-25.5	253792	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA
MW-148	2/28/2000	10.5-25.5	260583	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0
MW-148 Dup.	2/28/2000	10.5-25.5	260568	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0
MW-148	11/8/2000	10.5-25.5	280686	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0
MW-148 Dup.	11/8/2000	10.5-25.5	280687	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0
MW-148	6/21/2001	10.5-25.5	296407	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0
MW-148 Dup.	6/21/2001	10.5-25.5	296408	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0
MW-148	7/22/2002	10.5-25.5	334188	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0
MW-148	5/7/2003	10.5-25.5	845914	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-148	8/22/2003	10.5-25.5	872509	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-148	12/05/2003	10.5-25.5	503002479	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-148	9/11/2004	10.5-25.5	50337174	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-148	6/4/2004	10.5-25.5	503492654	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-150	7/17/1995	4-19	W5070259-01	<20	NA	NA	<5.0	NA	NA	NA	<5.0	<5.0	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA
MW-150	2/5/1997	4-19	W7020074-09	<20	NA	NA	<5.0	NA	NA	NA	<5.0	<5.0	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA
MW-150	11/25/1999	4-19	253803	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA
MW-150	2/29/2000	4-19	260575	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA
MW-150	11/8/2000	4-19	280688	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0
MW-150	6/20/2001	4-19	296390	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0
MW-150	7/19/2002	4-19	334159	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0
MW-150	5/7/2003	4-19	842917	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-150	8/22/2003	4-19	872600	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-150	12/05/2003	4-19	503002579	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-150	9/11/2004	4-19	50337232	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-150	6/4/2004	4-19	503492753	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tier II Residential Cleanup Goals - Groundwater ¹³⁾				3,040	NA	NA	5	NA	NA	0.289 ¹³⁾	NA	NA	64 ¹³⁾	64 ¹³⁾	64 ¹³⁾	1,060 ¹³⁾	NA	112 ¹³⁾	NA	23,161	100	NA	NA	NA
Tier II Non-Residential Cleanup Goals - Groundwater ¹³⁾				10,220	NA	NA	98.5	NA	NA	46.1 ¹³⁾	NA	NA	1,020 ¹³⁾	1,020 ¹³⁾	1,020 ¹³⁾	10,200 ¹³⁾	NA	2,040 ¹³⁾	NA	468.9	NA	NA	NA	NA

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal
Detected compound exceeds the VRP Tier II Residential Cleanup Goal
Detected compound is below the VRP Tier II Residential Cleanup Goal

See last page for footnotes

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Fornar General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Acetone	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoforn	Bromomethane	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorobromomethane	Chloroethane	Chloroform	Chloromethane	2-Chlorotoluene	4-Chlorotoluene	
MW-151	7/14/1995	5-20	W-5070191.03	<20	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA	
MW-151	2/6/1997	5-20	W-7020074.13	<20	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA	
MW-151	11/23/1999	5-20	253809	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0	
MW-151	2/29/2000	5-20	260579	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0	
MW-151	11/8/2000	5-20	286689	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0	
MW-151	6/20/2001	5-20	296598	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0	
MW-151	7/18/2002	5-20	324114	<20.0	<50.0	<5.0	<10	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<10	<5.0	<20	<10	<10	<10	
MW-151	12/04/2003	5-20	503002386	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-151	3/3/2004	5-20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-151	3/11/2004	5-20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-151	6/4/2004	5-20	503492951	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-152	7/14/1995	5-20	W-5070191.01	<20	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA	
MW-152	2/5/1997	5-20	W-7020074.10	<20	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA	
MW-152	1/17/1999	5-20	253801	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0	
MW-152	2/29/2000	5-20	260573	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0	
MW-152	11/8/2000	5-20	286690	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0	
MW-152	6/20/2001	5-20	296601	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0	
MW-152	7/15/2002	5-20	324016	<20.0	<50.0	<10	<10	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<10	<5.0	<20	<10	<5.0	<5.0	
MW-152	12/03/2003	5-20	503002537	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-152	3/11/2004	5-20	503372224	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-152	6/4/2004	5-20	503492720	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-153	7/14/1995	4.5-19.5	W-5070191.02	<20	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA	
MW-153	2/6/1997	4.5-19.5	W-7020074.14	<20	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA	
MW-153 Dup	2/6/1997	4.5-19.5	W-7020074.23	<20	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA	
MW-153	11/23/1999	4.5-19.5	253796	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0	
MW-153	2/28/2000	4.5-19.5	260594	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0	
MW-153	11/8/2000	4.5-19.5	286691	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0	
MW-153	6/21/2001	4.5-19.5	296404	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0	
MW-153 Dup	6/21/2001	4.5-19.5	296405	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0	
MW-153	7/22/2002	4.5-19.5	324185	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0	
MW-153	5/7/2003	4.5-19.5	842915	<20.0	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0	
MW-153 Dup	5/7/2003	4.5-19.5	842916	<20.0	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0	
MW-153	8/22/2003	4.5-19.5	872601	<20.0	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0	
MW-153	12/03/2003	4.5-19.5	503002545	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-153 Dup	12/03/2003	4.5-19.5	503002552	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-153	3/11/2004	4.5-19.5	50337182	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-153 Dup	3/11/2004	4.5-19.5	50337190	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-153	5/4/2004	4.5-19.5	503492670	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-153	5/4/2004	4.5-19.5	503492696	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-153 Dup	5/4/2004	4.5-19.5	503492696	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
Ter II Residential Cleanup Goals - Groundwater (1)				3,040	NA	5	NA	NA	0.289(2)	NA	NA	64(1)	64(1)	64(1)	1,060(2)	NA	112(2)	NA	23,161	100	NA	NA	NA	NA
Ter II Non-Residential Cleanup Goals - Groundwater (1)				10,220	NA	98.6	NA	NA	46.1(2)	NA	NA	1,020(2)	1,020(2)	1,020(2)	10,200(2)	NA	2,040(2)	NA	468.9	NA	NA	NA	NA	NA

Detected compound exceeds the VRP Ter II Non-Residential Cleanup Goal
Detected compound exceeds the VRP Ter II Residential Cleanup Goal
Detected compound is below the VRP Ter II Residential Cleanup Goal

See last page for footnotes

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Acetone	Acrolein	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromofluoromethane	Bromomethane	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorobromomethane	Chloroethane	Chloroform	Chloromethane	2-Chlorotoluene	4-Chlorotoluene
MW-154	7/14/1995	5-20	W5070191-12	<20	NA	NA	<5.0	NA	<5.0	<5.0	<1.0	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA
MW-154	2/6/1997	5-20	W7020074-11	<20	NA	<25.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA
MW-154	1/12/1999	5-20	253789	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-154	2/28/2000	5-20	260587	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-154	1/18/2000	5-20	260602	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-154	6/21/2001	5-20	296401	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-154	7/22/2002	5-20	324151	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-154	12/02/2003	5-20	503002560	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-154	3/1/2004	5-20	503237141	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-155	9/11/1995	14-29	W5090134-03	<200	NA	NA	<50	NA	<50	<50	<100	NA	NA	NA	<50	<50	<50	<50	<100	<50	<100	NA	NA
MW-155	2/6/1997	14-29	W7020074-15	<2,000	NA	NA	<50	NA	<50	<50	<100	NA	NA	NA	<50	<50	<50	<50	<100	<50	<100	NA	NA
MW-155	1/12/1999	14-29	253793	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-155	2/28/2000	14-29	260591	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-155	1/18/2000	14-29	260693	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-155	6/21/2001	14-29	296414	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-155	7/19/2002	14-29	324155	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-156	9/11/1995	5-20	W5090134-03	<20	NA	NA	<5.0	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA
MW-156	2/6/1997	5-20	W7020074-16	<20	NA	NA	<5.0	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA
MW-156 Dup.	2/6/1997	5-20	W7020074-24	<20	NA	NA	<5.0	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	NA	NA
MW-156	1/12/1999	5-20	253807	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-156	2/29/2000	5-20	260577	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-156	1/18/2000	5-20	260594	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-156	6/20/2001	5-20	296402	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-156	7/18/2002	5-20	324116	<20.0	<50.0	<50.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-156	12/04/2003	5-20	503002594	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-156	3/1/2004	5-20	503237133	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-156	6/11/2004	5-20	503518136	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-156 Dup.	6/11/2004	5-20	503518136	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-157	2/6/1997	5-20	W7020074-19	<200	NA	NA	<50	NA	<50	<50	<100	NA	NA	NA	<50	<50	<50	<50	<100	<50	<100	NA	NA
MW-157 Dup.	2/6/1997	5-20	W7020074-01	<20	NA	NA	<50	NA	<50	<50	<100	NA	NA	NA	<50	<50	<50	<50	<100	<50	<100	NA	NA
MW-157	2/29/2000	5-20	260381	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-157	1/18/2000	5-20	260695	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-157	6/21/2001	5-20	296411	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-157	7/19/2002	5-20	324153	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-157	12/04/2003	5-20	503002602	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-157	3/1/2004	5-20	503237125	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-157	6/4/2004	5-20	503493556	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				3,040	NA	NA	5	NA	NA	0.289 ⁽²⁾	NA	NA	64 ⁽³⁾	64 ⁽²⁾	1,060 ⁽²⁾	NA	112 ⁽²⁾	NA	23,161	100	NA	NA	NA
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				10,220	NA	NA	98.5	NA	NA	46.1 ⁽²⁾	NA	NA	1,020 ⁽³⁾	1,020 ⁽²⁾	10,200 ⁽²⁾	NA	2,040 ⁽²⁾	NA	NA	468.9	NA	NA	NA

Tier II Non-Residential Cleanup Goals - Groundwater⁽¹⁾
 Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal
 Detected compound exceeds the VRP Tier II Residential Cleanup Goal
 Detected compound is below the VRP Tier II Residential Cleanup Goal

See last page for footnotes

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Albion Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA, Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Acetone	Acrylonitrile	Benzene	Bromobenzene	Bromoethers	Bromochloromethane	Bromodichloromethane	Bromomethane	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorobromomethane	Chloroethane	Chloroform	Chloromethane	2-Chlorotoluene	4-Chlorotoluene
MW-158	14-29	14-29	W7020074-20	<20	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	NA	NA
MW-158	11/23/1999	14-29	253794	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-158	2/28/2000	14-29	260592	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-158 Dup.	2/28/2000	14-29	260584	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-158	11/8/2000	14-29	260696	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-158	6/21/2001	14-29	260645	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-158	7/19/2002	14-29	324156	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-159	2/28/2000	NA	260585	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-159	11/7/2000	NA	260607	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-159	6/21/2001	NA	260612	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-159	7/19/2002	Unscreened	324152	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-150	3/2/2000	3-13	260551	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-150	6/21/2001	3-13	260698	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-150	7/17/2002	3-13	324027	<20.0	<50.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-150 Dup.	7/17/2002	3-13	324028	<20.0	<50.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-150	12/04/2003	3-13	503002610	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-150	3/11/2004	3-13	503032781	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-150	6/4/2004	3-13	503493264	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-151	3/2/2000	3-13	260552	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-151	11/8/2000	3-13	260699	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-151	6/21/2001	3-13	260615	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-151	7/18/2002	3-13	324103	<20.0	<50.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-151	12/04/2003	3-13	503002628	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-151	3/11/2004	3-13	503237999	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-151	6/4/2004	3-13	503493272	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-161	11/8/2000	NA	260700	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-162	6/20/2001	NA	260694	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-162	7/18/2002	10-20	324118	<20.0	<50.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-163	11/8/2000	NA	260701	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-163	6/20/2001	NA	260695	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-163	7/18/2002	6-16	324117	<20.0	<50.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-163 Dup.	7/18/2002	6-16	324119	<20.0	<50.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-164	11/7/2000	16-26	260702	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-164	6/21/2001	16-26	260613	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-164	7/19/2002	16-26	324154	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-164	12/04/2003	16-26	503002636	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-164	3/11/2004	16-26	503237117	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
MW-164	6/4/2004	16-26	503493249	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<5.0	<5.0
Tier II Residential Cleanup Goals - Groundwater ¹³				3,040	NA	5	NA	NA	0.289 ¹²	NA	NA	64 ¹²	64 ¹²	64 ¹²	1,020 ¹²	1,060 ¹²	NA	NA	23,161	100	NA	NA	NA
Tier II Non-Residential Cleanup Goals - Groundwater ¹³				10,220	NA	98.5	NA	NA	46.1 ¹²	NA	NA	1,020 ¹²	1,020 ¹²	1,020 ¹²	10,200 ¹²	NA	2,040 ¹²	NA	NA	468.9	NA	NA	NA

Dioxin compound exceeds the VRP Tier II Non-Residential Cleanup Goal
Dioxin compound exceeds the VRP Tier II Residential Cleanup Goal
Dioxin compound is below the VRP Tier II Residential Cleanup Goal

See last page for footnotes

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Acetone	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorobromomethane	Chloroethane	Chloroform	Chloromethane	2-Chlorobutene	4-Chlorobutene
MW-1655	6/1/2001	10-20	294563	<50	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-1655 Dup.	7/1/2001	10-20	294564	<50	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-165	7/18/2002	10-20	324108	<20.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-1655	12/05/2003	10-20	503007644	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1655	3/11/2004	10-20	503237083	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1655	6/3/2004	10-20	503491066	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1655	6/1/2001	10-20	294565	<50	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-166	7/18/2002	10-20	324106	<20.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-1665	12/19/2003	10-20	503046765	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1665 Dup.	12/19/2003	10-20	503046773	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1665	3/11/2004	10-20	503237067	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1665	6/3/2004	10-20	503491033	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1675	6/1/2001	12-22	294566	<50	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-1675	7/17/2002	12-22	324126	<20.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-1675	12/04/2003	12-22	503002669	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1675	3/11/2004	12-22	503237109	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1675	6/3/2004	12-22	503491323	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1685	6/1/2001	12-22	294567	<50	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-1685	7/18/2002	12-22	324110	<20.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-1685 Dup.	7/18/2002	12-22	324111	<20.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-1695	1/30/2002	15-25	312595	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-1695	7/17/2002	15-25	324119	<20.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-1695	12/04/2003	15-25	503002693	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1695	3/11/2004	15-25	503237042	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1695	6/3/2004	15-25	503491199	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1705	1/31/2002	17-27	313002	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-1705 Dup.	1/31/2002	17-27	313003	<50	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-1705	7/17/2002	17-27	324023	<20.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Tier II Residential Cleanup Goals - Groundwater¹⁷

Tier II Non Residential Cleanup Goals - Groundwater¹⁸

Residential compound exceeds the VRP Tier II Non Residential Cleanup Goal
Residential compound exceeds the VRP Tier II Residential Cleanup Goal
Residential compound exceeds the VRP Tier II Residential Cleanup Goal

See last page for footnotes

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)

Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Acetone	Acrolein	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromomethane	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	2-Chlorotoluene	4-Chlorotoluene
MW-1715	1/30/2002	12-22	312997	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
MW-1715	7/17/2002	12-22	324021	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<5.0	<1.0	<1.0
MW-1725	9/4/2002	15-25	327656	23	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-1735	3/7/2004		503207540	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CHT1-MW235 (MW135 Dup)	5/27/1993	NA	69678	<20	<50	<50	<1.0	NA	NA	<1.0	<5.0	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<10	NA	NA
OB-1	11/29/1999	5-15	253805	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
OB-2	11/29/1999	5-15	253806	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10	<5.0	<5.0
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				3,040	NA	NA	5	NA	NA	0.289 ⁽²⁾	NA	64 ⁽³⁾	64 ⁽³⁾	1,020 ⁽³⁾	1,020 ⁽³⁾	1,060 ⁽³⁾	112 ⁽³⁾	NA	23,161	100	NA	NA	NA
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				10,220	NA	NA	98.6	NA	NA	46.1 ⁽²⁾	NA	1,020 ⁽³⁾	1,020 ⁽³⁾	1,020 ⁽³⁾	10,200 ⁽³⁾	NA	2,040 ⁽³⁾	NA	NA	468.9	NA	NA	NA

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds

Samples analyzed using EPA SW-846 Method 8260

µg/L = micrograms per liter

NS = Not Applicable

NA = Not Analyzed

1,2-Dichloroethane and trans-1,2-Dichloroethene results are combined

1,1-Dichloroethene and cis-1,2-Dichloroethene results are combined

Indian Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F, Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Health Evaluation by Office

of Environmental Response, July 1996.

(2) Calculated using surrogate toxicity values and Tier II equations.

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	2-Chloroethyl vinyl ether	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane (E/B)	Dibromomethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	trans-1,2-Dichloro-2-butene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloropropane	1,3-Dichloropropane	2,2-Dichloropropane	1,1-Dichloropropene	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethyl Acetate	Ethylbenzene	Ethyl methacrylate
MW-1	3/3/2004	10.5-15.5	503207557	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-2	3/3/2004	12-17	503207555	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10-1	9/28/1994	7-17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-10-1	10/5/1994	7-17	W5070191.13	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-10-1	7/14/1995	7-17	W7020074.01	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-10-1	2/5/1997	7-17	253788	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1 Dup	11/23/1999	7-17	253812	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1	2/29/2000	7-17	266586	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1	11/8/2000	7-17	266650	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1	7/19/2002	7-17	324157	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1 Dup	7/19/2002	7-17	324158	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1	5/7/2003	7-17	842918	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1	8/22/2003	7-17	872595	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1R	12/03/2003	7-17	503002107	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1R Dup	12/03/2003	7-17	503002115	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1R	3/11/2004	7-17	503237240	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1R Dup	3/11/2004	7-17	503237257	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1R	6/4/2004	7-17	503429239	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-10-1R Dup	6/4/2004	7-17	503429228	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-132	9/19/92	10-20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-132	5/27/1993	10-20	69681	<100	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
MW-132	7/14/1995	10-20	W5070191.09	<10	NA	NA	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
MW-132	2/5/1997	10-20	W7020074.02	<250	NA	NA	NA	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
MW-132	11/23/1999	10-20	253791	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-132	2/28/2000	10-20	256589	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-132	7/22/2002	10-20	324190	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-132	5/7/2003	10-20	842913	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-132	8/22/2003	10-20	872596	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-132	12/03/2003	10-20	503002123	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-132	3/11/2004	10-20	503237166	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-132	6/4/2004	10-20	503429247	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-133	9/19/92	8-18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-133	5/27/1993	8-18	69680	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
MW-133	9/11/1995	8-18	W5090134.01	<10	NA	NA	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
MW-133	2/5/1997	8-18	W7020074.03	<10	NA	NA	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
MW-133	11/23/1999	8-18	253798	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-133	2/28/2000	8-18	256596	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-133R	12/04/2003	8-18	503002131	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-133R	3/11/2004	8-18	503237208	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-133R	6/4/2004	8-18	5034292704	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50

Tier II Residential Cleanup Goals - Groundwater¹⁰

Tier II Non-Residential Cleanup Goals - Groundwater¹⁰

Percent compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Percent compound exceeds the VRP Tier II Residential Cleanup Goal

Percent compound exceeds the VRP Tier II Residential Cleanup Goal

See last page for footnotes

Table 9a - Shallow Monitoring Well Groundwater - VOCs
Page 9 of 32

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	2-Chloroethyl vinyl ether	1,1-Dibromo-3-chloropropane	1,2-Dibromoethane (EDB)	Dibromomethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	trans-1,4-Dichloro-2-butene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloropropane	1,3-Dichloropropane	2,2-Dichloropropane	1,1-Dichloropropene	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethyl Acetate	Ethylbenzene	Ethyl methacrylate
MW-135	9/1/992	10-20	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	<5	NA	<5	<5	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA
MW-135	9/1/992	10-20	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	<5	NA	<5	<5	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA
MW-135	5/27/1993	10-20	69679	<5.0	<10	<10	<10	<10	<10	<10	NA	<10	<10	<10	<10	<10	<10	<10	<10	NA	<10	<10	<10	<10	<10
MW-135	7/14/1995	10-20	W5070191-14	<10	NA	NA	NA	<10	<10	<10	NA	<10	<10	<10	<10	<10	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA
MW-135	2/6/1997	10-20	W7020074-04	<10	NA	NA	NA	<10	<10	<10	NA	<10	<10	<10	<10	<10	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA
MW-135	11/23/1999	10-20	253802	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10
MW-135	2/29/2000	10-20	260514	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10
MW-135	11/8/2000	10-20	280651	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10
MW-135	6/20/2001	10-20	296593	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10
MW-135	7/15/2002	10-20	324015	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10
MW-135	12/04/2003	10-20	503002149	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10
MW-145	6/4/1993	17.5-27.5	69941	<20	<50	<50	<50	<50	<50	<50	<50	<5	<5	NA	<5	440	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100
MW-145	7/14/1995	17.5-27.5	W5070191-10	<10	NA	NA	NA	<10	<10	<10	NA	<5	<5	NA	<5	530	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-145	2/5/1997	17.5-27.5	W7020074-05	<10	NA	NA	NA	<10	<10	<10	NA	<5	<5	NA	<5	530	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-145	11/23/1999	17.5-27.5	253799	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	770	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-145 Day	11/23/1999	17.5-27.5	253813	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	850 E	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-145	2/29/2000	17.5-27.5	260597	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	850 E	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-145	11/8/2000	17.5-27.5	280652	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	710	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-145	6/21/2001	17.5-27.5	296418	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	630	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-145	7/22/2002	17.5-27.5	324184	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	460	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-145	12/04/2003	17.5-27.5	503002453	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0	650	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-146	6/4/1993	15-25	69942	<5.0	<10	<10	<10	<10	<10	<10	NA	<10	<10	<10	<10	<10	<10	<10	NA	NA	<10	<10	<10	<10	<10
MW-146	7/14/1995	15-25	W5070191-11	<10	NA	NA	NA	<10	<10	<10	NA	<10	<10	<10	<10	<10	<10	<10	NA	NA	<10	<10	<10	<10	<10
MW-146	2/5/1997	15-25	W7020074-06	<10	NA	NA	NA	<10	<10	<10	NA	<10	<10	<10	<10	<10	<10	<10	NA	NA	<10	<10	<10	<10	<10
MW-146	11/23/1999	15-25	253800	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-146	2/29/2000	15-25	260572	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-146	11/8/2000	15-25	280684	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-146	6/21/2001	15-25	296419	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-146	7/15/2002	15-25	324017	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-146	12/03/2003	15-25	503002461	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-146	3/11/2004	15-25	50337216	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-146	6/4/2004	15-25	503497738	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-147	6/4/1993	20-30	69943	<5.0	<10	<10	<10	<10	<10	<10	NA	<10	<10	<10	<10	140	<10	<10	<10	NA	<10	<10	<10	<10	<10
MW-147	7/14/1995	20-30	W5070191-08	<10	NA	NA	NA	<10	<10	<10	NA	<10	<10	<10	<10	<10	<10	<10	NA	NA	<10	<10	<10	<10	<10
MW-147	2/5/1997	20-30	W7020074-07	<10	NA	NA	NA	<10	<10	<10	NA	<10	<10	<10	<10	<10	<10	<10	NA	NA	<10	<10	<10	<10	<10
MW-147	11/23/1999	20-30	253790	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-147	2/28/2000	20-30	260588	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-147	11/8/2000	20-30	280685	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-147	6/21/2001	20-30	296409	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
Tier II Residential Cleanup Goals - Groundwater ¹⁰																									
				NA	NA	NA	NA	600	600	75	NA	540	5	7	70	123 ¹⁰	NA	NA	NA	NA	0.850 ¹⁰	NA	NA	700	NA
Tier II Non Residential Cleanup Goals - Groundwater ¹⁰																									
				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Detected compound exceeds the VRP Tier II Non Residential Cleanup Goal
Detected compound exceeds the VRP Tier II Residential Cleanup Goal
Detected compound is below the VRP Tier II Residential Cleanup Goal

See last page for footnotes

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	2-Chloroethyl vinyl ether	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane (EDB)	Dibromomethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	trans-1,4-Dichloro-2-butene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloropropane	1,3-Dichloropropane	1,1-Dichloropropene	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethyl Acetate	Ethylbenzene	Ethyl methacrylate	
MW-147A	7/22/2002	20-30	324189	<50	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<10	
MW-147A	5/7/2003	20-30	842912	<50	<50	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA	<10	<50	
MW-147A	8/22/2003	20-30	872588	<50	<50	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA	<10	<50	
MW-147A	12/03/2003	20-30	503002578	<50	<50	<50	<10	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<100	
MW-147A	3/11/2004	20-30	503237158	<50	<50	<50	<10	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<100	
MW-147A	6/4/2004	20-30	503492597	<50	<50	<50	<10	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<100	
MW-148	6/4/1993	10.5-25.5	69944	<400	<800	<40	<800	<40	<80	NA	<80	<800	<80	<80	<80	NA	NA	NA	<80	<80	<800	<800	<800	
MW-148	7/14/1995	10.5-25.5	W507019107	<10	NA	NA	NA	<10	<10	NA	NA	NA	<50	<50	<50	NA	NA	NA	<50	<50	NA	<50	NA	
MW-148	2/5/1997	10.5-25.5	W702007408	<10	NA	NA	NA	<10	<10	NA	NA	NA	<50	<50	<50	NA	NA	NA	<50	<50	NA	<50	NA	
MW-148	11/23/1999	10.5-25.5	253792	<50	<50	<50	<10	<50	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<10	
MW-148	2/28/2000	10.5-25.5	260583	<50	<50	<50	<10	<50	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<10	
MW-148 Dup.	2/28/2000	10.5-25.5	260568	<50	<50	<50	<10	<50	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<10	
MW-148	1/18/2000	10.5-25.5	230686	<50	<50	<50	<10	<50	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<10	
MW-148 Dup.	1/18/2000	10.5-25.5	230687	<50	<50	<50	<10	<50	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<10	
MW-148	6/21/2001	10.5-25.5	296408	<50	<50	<50	<10	<50	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<10	
MW-148 Dup.	6/21/2001	10.5-25.5	296408	<50	<50	<50	<10	<50	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<10	
MW-148	7/22/2002	10.5-25.5	324188	<50	<50	<50	<10	<50	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<10	
MW-148	5/7/2003	10.5-25.5	842914	<50	<50	<50	<10	<50	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<10	
MW-148	8/22/2003	10.5-25.5	872589	<50	<50	<50	<10	<50	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<10	
MW-148	12/03/2003	10.5-25.5	503002479	<50	<50	<50	<10	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<100	
MW-148	3/11/2004	10.5-25.5	503237174	<50	<50	<50	<10	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<100	
MW-148	6/4/2004	10.5-25.5	503492654	<50	<50	<50	<10	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<100	
MW-150	7/17/1995	4-19	W5070229401	<10	NA	NA	NA	<10	<10	NA	NA	NA	<50	<50	<50	NA	NA	NA	<50	<50	NA	<50	NA	
MW-150	2/5/1997	4-19	W702007409	<10	NA	NA	NA	<10	<10	NA	NA	NA	<50	<50	<50	NA	NA	NA	<50	<50	NA	<50	NA	
MW-150	11/23/1999	4-19	253803	<50	<50	<50	<10	<50	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<10	
MW-150	2/29/2000	4-19	260575	<50	<50	<50	<10	<50	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<10	
MW-150	1/18/2000	4-19	230688	<50	<50	<50	<10	<50	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<10	
MW-150	6/20/2001	4-19	296390	<50	<50	<50	<10	<50	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<10	
MW-150	7/19/2002	4-19	324159	<50	<50	<50	<10	<50	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<10	
MW-150	5/7/2003	4-19	842917	<50	<50	<50	<10	<50	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<10	
MW-150	8/22/2003	4-19	872600	<50	<50	<50	<10	<50	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<10	
MW-150	12/03/2003	4-19	503002529	<50	<50	<50	<10	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<100	
MW-150	3/11/2004	4-19	503237232	<50	<50	<50	<10	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<100	
MW-150	6/4/2004	4-19	503492753	<50	<50	<50	<10	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	<50	<100	
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾																								
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				NA	NA	NA	NA	75	NA	NA	NA	NA	640	5	7	70	128 ⁽²⁾	NA	NA	NA	NA	NA	700	NA
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				NA	NA	NA	NA	119.2	NA	NA	NA	NA	10,220	31.4	7	1,022	2,040 ⁽²⁾	NA	NA	NA	NA	NA	10,220	NA

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal
Detected compound exceeds the VRP Tier II Residential Cleanup Goal
Detected compound exceeds the VRP Tier II Residential Cleanup Goal

See last page for footnotes

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	2-Chloroethyl vinyl ether	1,2-Dibromoethane (E1B)	Dibromomethane	1,2-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	trans-1,4-Dichloro-2-butene	1,2-Dichloroethane	1,1-Dichloroethane	cis-1,2-Dichloroethane	trans-1,2-Dichloroethane	1,2-Dichloropropane	1,3-Dichloropropane	1,1-Dichloropropene	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethyl Acetate	Ethylbenzene	Ethyl methacrylate
MW-151	7/14/1995	5-20	W-5070191-03	<10	NA	NA	<10	<10	NA	NA	<5.0	<5.0	74	74	<5.0	NA	NA	NA	<5.0	NA	<5.0	NA
MW-151	2/6/1997	5-20	W-5070074-13	<10	NA	NA	<10	<10	NA	NA	<5.0	<5.0	20	20	<5.0	NA	NA	NA	<5.0	NA	<5.0	NA
MW-151	11/23/1999	5-20	253869	<50	<50	<10	<50	<50	<10	<50	<50	<50	35	35	<50	<50	<50	<50	<50	NA	<50	<10
MW-151	2/29/2000	5-20	260579	<50	<50	<10	<50	<50	<10	<50	<50	<50	48	48	<50	<50	<50	<50	<50	NA	<50	<10
MW-151	1/18/2000	5-20	260589	<50	<50	<10	<50	<50	<10	<50	<50	<50	54	54	<50	<50	<50	<50	<50	NA	<50	<10
MW-151	6/20/2001	5-20	324114	<50	<50	<10	<50	<50	<10	<50	<50	<50	46	46	<50	<50	<50	<50	<50	NA	<50	<10
MW-151	7/18/2002	5-20	503002586	<50	<50	<10	<50	<50	<10	<50	<50	<50	64	64	<50	<50	<50	<50	<50	NA	<50	<10
MW-151	12/04/2003	5-20	503002586	<50	<50	<10	<50	<50	<10	<50	<50	<50	64	64	<50	<50	<50	<50	<50	NA	<50	<10
MW-151	3/3/2004	5-20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-151	3/11/2004	5-20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-151	6/4/2004	5-20	503402951	<50	<50	<10	<50	<50	<10	<50	<50	<50	74	74	<50	<50	<50	<50	<50	NA	<50	<100
MW-152	7/14/1995	5-20	W-5070191-01	<10	NA	NA	<10	<10	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	<5.0	NA	<5.0	<100
MW-152	2/5/1997	5-20	W-5070074-10	<10	NA	NA	<10	<10	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	<5.0	NA	<5.0	<100
MW-152	11/23/1999	5-20	253801	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<10
MW-152	2/29/2000	5-20	260573	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<10
MW-152	1/18/2000	5-20	260590	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<10
MW-152	6/20/2001	5-20	296401	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<10
MW-152	7/15/2002	5-20	324016	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<10
MW-152	12/03/2003	5-20	503002537	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<100
MW-152	3/11/2004	5-20	503217224	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<100
MW-152	6/4/2004	5-20	503497720	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<100
MW-153	7/14/1995	4.5-19.5	W-5070191-02	<10	NA	NA	<10	<10	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	<5.0	NA	<5.0	NA
MW-153	2/6/1997	4.5-19.5	W-5070074-14	<10	NA	NA	<10	<10	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	<5.0	NA	<5.0	NA
MW-153	2/6/1997	4.5-19.5	W-5070074-23	<10	NA	NA	<10	<10	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	<5.0	NA	<5.0	NA
MW-153	11/23/1999	4.5-19.5	253796	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<10
MW-153	2/28/2000	4.5-19.5	260594	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<10
MW-153	1/18/2000	4.5-19.5	286691	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<10
MW-153	6/21/2001	4.5-19.5	296404	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<10
MW-153	7/22/2002	4.5-19.5	324185	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<10
MW-153	5/7/2003	4.5-19.5	842915	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<10
MW-153	8/22/2003	4.5-19.5	842916	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<10
MW-153	12/03/2003	4.5-19.5	872601	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<10
MW-153	12/03/2003	4.5-19.5	503002545	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<100
MW-153	12/03/2003	4.5-19.5	503002552	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<100
MW-153	3/11/2004	4.5-19.5	50333182	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<100
MW-153	3/11/2004	4.5-19.5	50333190	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<100
MW-153	6/4/2004	4.5-19.5	503492670	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<100
MW-153	6/4/2004	4.5-19.5	503492696	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<100
MW-153	6/4/2004	4.5-19.5	503492696	<50	<50	<10	<50	<50	<10	<50	<50	<50	<5.0	<5.0	<50	<50	<50	<50	<50	NA	<50	<100
Tier II Residential Cleanup Goals - Groundwater ¹⁰¹				NA	NA	NA	600	600	75	NA	640	5	7	70	128 ¹⁰²	NA	NA	0.850 ¹⁰³	NA	NA	700	NA
Tier II Non-Residential Cleanup Goals - Groundwater ¹⁰¹				NA	NA	NA	1192	NA	NA	NA	10,220	31.4	7	1,022	2,340 ¹⁰²	NA	NA	28.6 ¹⁰³	NA	NA	10,220	NA

¹⁰¹ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

¹⁰² Detected compound exceeds the VRP Tier II Residential Cleanup Goal

¹⁰³ Detected compound is below the VRP Tier II Residential Cleanup Goal

See last page for footnotes

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	2-Chloroethyl vinyl ether	1,2-Dibromo-3-chloropropane (EDB)	Dibromomethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	trans-1,4-Dichloro-2-butene	1,1-Dichloroethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloropropane	1,3-Dichloropropane	2,2-Dichloropropane	1,1-Dichloropropene	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethyl Acetate	Ethylbenzene	Ethyl methacrylate
MW-154	7/14/1995	5-20	W507019-12	<10	NA	NA	<10	<10	<10	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-154	2/5/1997	5-20	W7020074-11	<10	NA	NA	<10	<10	<10	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-154	1/23/1999	5-20	253789	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	NA
MW-154	2/28/2000	5-20	260587	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	NA
MW-154	1/18/2000	5-20	260692	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	NA
MW-154	6/21/2001	5-20	296410	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	NA
MW-154	7/22/2002	5-20	324191	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	NA
MW-154	12/03/2003	5-20	503002560	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	NA
MW-154	3/11/2004	5-20	503237141	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	NA
MW-155	9/11/1995	14-29	W5090134-02	<100	NA	NA	<100	<100	<100	NA	NA	<50	<50	<50	<50	<50	NA	NA	<50	<50	<50	NA	<50	NA
MW-155	2/6/1997	14-29	W7020074-15	<1,000	NA	NA	<1,000	<1,000	<1,000	NA	NA	<500	<500	<500	<500	<500	NA	NA	<500	<500	<500	NA	<500	NA
MW-155	1/23/1999	14-29	253793	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	NA
MW-155	2/28/2000	14-29	260591	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	NA
MW-155	1/18/2000	14-29	260693	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	NA
MW-155	6/21/2001	14-29	296414	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	NA
MW-155	7/19/2002	14-29	324155	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	NA
MW-156	9/11/1995	5-20	W5090134-03	<10	NA	NA	<10	<10	<10	NA	NA	<50	<50	<50	<50	<50	NA	NA	<50	<50	<50	NA	<50	NA
MW-156	2/6/1997	5-20	W7020074-16	<10	NA	NA	<10	<10	<10	NA	NA	<50	<50	<50	<50	<50	NA	NA	<50	<50	<50	NA	<50	NA
MW-156 Dup	2/6/1997	5-20	W7020074-24	<10	NA	NA	<10	<10	<10	NA	NA	<50	<50	<50	<50	<50	NA	NA	<50	<50	<50	NA	<50	NA
MW-156	1/23/1999	5-20	253807	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	NA
MW-156	2/29/2000	5-20	260577	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	NA
MW-156	1/18/2000	5-20	260694	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	NA
MW-156	6/20/2001	5-20	296402	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	NA
MW-156	7/18/2002	5-20	324116	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	NA
MW-156	12/04/2003	5-20	503002594	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	NA
MW-156	3/11/2004	5-20	503237133	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	NA
MW-156	6/11/2004	5-20	503518128	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	NA
MW-156 Dup	6/11/2004	5-20	503518136	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	NA
MW-157	2/6/1997	5-20	W7020074-19	<100	NA	NA	<100	<100	<100	NA	NA	<50	<50	<50	<50	<50	NA	NA	<50	<50	<50	NA	<50	NA
MW-157 Dup	2/26/1997	5-20	W7020074-01	<10	NA	NA	<10	<10	<10	NA	NA	<50	<50	<50	<50	<50	NA	NA	<50	<50	<50	NA	<50	NA
MW-157	2/29/2000	5-20	260581	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	NA
MW-157	1/18/2000	5-20	260695	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	NA
MW-157	6/21/2001	5-20	296411	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	NA
MW-157	7/19/2002	5-20	324153	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	NA
MW-157	12/04/2003	5-20	503002602	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	NA
MW-157	3/11/2004	5-20	503237125	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	NA
MW-157	6/4/2004	5-20	503493256	<50	<50	<10	<5.0	<5.0	<5.0	<10	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	NA
Tier II Residential Cleanup Goals - Groundwater ¹³⁾				NA	NA	NA	600	600	75	NA	640	5	7	70	128 ¹²⁾	NA	NA	NA	0.850 ¹²⁾	NA	NA	NA	700	NA
Tier II Non-Residential Cleanup Goals - Groundwater ¹¹⁾				NA	NA	NA	9,198	NA	119.2	NA	10,220	31.4	7	1,022	2,040 ¹²⁾	NA	NA	NA	28.6 ¹²⁾	NA	NA	NA	10,220	NA

¹¹⁾ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

¹²⁾ Detected compound exceeds the VRP Tier II Residential Cleanup Goal

¹³⁾ Detected compound is below the VRP Tier II Residential Cleanup Goal

See last page for footnotes

Table 9a - Shallow Monitoring Well Groundwater - VOCs
Page 13 of 32

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	2-Chloroethyl vinyl ether	1,2-Dibromomethane (EDB)	Dibromomethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	trans-1,4-Dichloro-2-butene	1,1-Dichloroethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloropropane	1,3-Dichloropropane	2,2-Dichloropropane	1,1-Dichloropropene	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethyl Acetate	Ethylbenzene	Ethyl methacrylate	
MW-158	2/6/1997	14-29	W7020074-20	<10	NA	NA	<10	<10	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-158	11/23/1999	14-29	253794	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-158	2/28/2000	14-29	260592	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-158 Dup.	2/28/2000	14-29	260594	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-158	11/8/2000	14-29	260596	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-158	6/21/2001	14-29	296415	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-158	7/19/2002	14-29	324116	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-159	2/28/2000	NA	260583	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-159	11/7/2000	NA	260697	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-159	6/21/2001	NA	296412	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-159	7/19/2002	Unknown	324152	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-160	3/2/2000	3-13	260551	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-160	11/8/2000	3-13	260698	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-160	6/21/2001	3-13	296417	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-160	7/17/2002	3-13	324027	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-160 Dup.	7/17/2002	3-13	324028	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-160	12/04/2003	3-13	503002610	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<100
MW-160	3/1/2004	3-13	503337281	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<100
MW-160	6/4/2004	3-13	503492564	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<100
MW-161	3/2/2000	3-13	260552	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-161	11/8/2000	3-13	260699	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-161	6/21/2001	3-13	296416	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-161	7/18/2002	3-13	324103	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-161	12/04/2003	3-13	503002628	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<100
MW-161	3/1/2004	3-13	503337299	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<100
MW-161	6/4/2004	3-13	503492372	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<100
MW-162	11/8/2000	NA	280700	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-162	6/20/2001	NA	296394	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-162	7/18/2002	10-20	324118	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-163	11/8/2000	NA	280701	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-163	6/20/2001	NA	296395	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-163	7/18/2002	6-16	324117	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-163 Dup.	7/18/2002	6-16	324119	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-164	11/7/2000	16-26	280702	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-164	6/21/2001	16-26	296413	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-164	7/19/2002	16-26	324154	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<10.0
MW-164	12/05/2003	16-26	503002636	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<100
MW-164	3/1/2004	16-26	503337117	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<100
MW-164	6/4/2004	16-26	503492349	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<100
Tier II Residential Cleanup Goals - Groundwater ¹⁰				NA	NA	NA	640	600	75	NA	NA	640	5	7	70	128 ¹²	NA	NA	NA	0.850 ¹²	NA	<5.0	NA	700	NA
Tier II Non-Residential Cleanup Goals - Groundwater ¹⁰				NA	NA	NA	11,920	NA	NA	NA	NA	10,220	31.4	7	1,022	2,040 ¹²	NA	NA	NA	NA	NA	NA	NA	10,220	NA

¹⁰ Tier II Non-Residential Cleanup Goals - Groundwater

¹¹ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

¹² Detected compound exceeds the VRP Tier II Residential Cleanup Goal

¹³ Detected compound exceeds the VRP Tier II Residential Cleanup Goal

¹⁴ Detected compound exceeds the VRP Tier II Residential Cleanup Goal

¹⁵ Detected compound exceeds the VRP Tier II Residential Cleanup Goal

¹⁶ Detected compound exceeds the VRP Tier II Residential Cleanup Goal

¹⁷ Detected compound exceeds the VRP Tier II Residential Cleanup Goal

¹⁸ Detected compound exceeds the VRP Tier II Residential Cleanup Goal

¹⁹ Detected compound exceeds the VRP Tier II Residential Cleanup Goal

²⁰ Detected compound exceeds the VRP Tier II Residential Cleanup Goal

²¹ Detected compound exceeds the VRP Tier II Residential Cleanup Goal

²² Detected compound exceeds the VRP Tier II Residential Cleanup Goal

²³ Detected compound exceeds the VRP Tier II Residential Cleanup Goal

²⁴ Detected compound exceeds the VRP Tier II Residential Cleanup Goal

²⁵ Detected compound exceeds the VRP Tier II Residential Cleanup Goal

²⁶ Detected compound exceeds

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allstate Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2429E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	2-Chloroethyl vinyl ether	1,2-Dibromo-3-chloropropane	1,2-Dibromomethane (EUB)	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dibromodichloromethane	Trans-1,2-Dichloro-2-butene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	Trans-1,2-Dichloroethene	1,2-Dichloropropane	1,3-Dichloropropane	1,3-Dichloropropane	2,2-Dichloropropane	1,1-Dichloropropane	cis-1,3-Dichloropropane	trans-1,3-Dichloropropane	Ethyl Acetate	Ethylbenzene	Ethyl methyl methacrylate
MW-165S Dup.	6/12/2001	10-20	294563	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-165S Dup.	6/12/2001	10-20	294564	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-165S Dup.	6/12/2001	10-20	324108	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-165S Dup.	6/12/2001	10-20	50302644	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-165S Dup.	6/12/2001	10-20	50337083	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-165S Dup.	6/12/2001	10-20	503493066	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-165S Dup.	6/12/2001	10-20	294565	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-166S Dup.	6/12/2001	10-20	324106	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-166S Dup.	6/12/2001	10-20	503046765	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-166S Dup.	6/12/2001	10-20	503046773	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-166S Dup.	6/12/2001	10-20	503046773	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-166S Dup.	6/12/2001	10-20	50337057	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-166S Dup.	6/12/2001	10-20	503493033	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-167S Dup.	6/12/2001	12-22	294566	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-167S Dup.	6/12/2001	12-22	324076	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-167S Dup.	6/12/2001	12-22	50302669	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-167S Dup.	6/12/2001	12-22	50337199	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-167S Dup.	6/12/2001	12-22	503493223	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-168S Dup.	6/12/2001	12-22	294567	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-168S Dup.	6/12/2001	12-22	324110	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-168S Dup.	6/12/2001	12-22	324111	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-169S Dup.	6/12/2001	12-22	312995	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-169S Dup.	6/12/2001	12-22	324019	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-169S Dup.	6/12/2001	12-22	50302693	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-169S Dup.	6/12/2001	12-22	50302693	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-169S Dup.	6/12/2001	12-22	50337042	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-169S Dup.	6/12/2001	12-22	503493199	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-170S Dup.	6/12/2001	17-27	313002	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-170S Dup.	6/12/2001	17-27	313003	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA
MW-170S Dup.	6/12/2001	17-27	324023	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<5.0	23.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA

Tier II Residential Cleanup Goals - Groundwater¹⁰⁷

Tier II Non-Residential Cleanup Goals - Groundwater¹⁰⁷

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal
Detected compound exceeds the VRP Tier II Residential Cleanup Goal
Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

See last page for footnotes

Table 9a - Shallow Monitoring Well Groundwater - VOCs
Page 15 of 32

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	2-Chloroethyl vinyl ether	1,2-Dibromo-3-chloropropane	1,2-Dibromomethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	trans-1,4-Dichloro-2-butene	1,1-Dichloroethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloropropane	2,2-Dichloropropane	1,1-Dichloropropene	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethyl Acetate	Ethylbenzene	Ethyl methacrylate	
MW-171S	1/30/2002	12-22	312997	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<1.0	
MW-171S	7/17/2002	12-22	324021	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	
MW-172S	9/4/2002	15-23	327656	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	
MW-173S	3/5/2004		563207540	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
CH131-MW23S (MW135 Dup)	5/27/1993	NA	69678	<5.0	<1.0	<1.0	<5.0	<5.0	<5.0	<1.0	NA	<5.0	<5.0	<1.0	<1.0	<1.0	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	
DB-1	11/23/1999	5-15	253805	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	8.9	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<1.0	
DB-2	11/23/1999	5-15	253806	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	106	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<1.0	
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				NA	NA	NA	NA	500	600	75	NA	NA	640	5	7	70	123 ⁽²⁾	NA	NA	0.850 ⁽²⁾	NA	NA	700	NA
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				NA	NA	NA	NA	9,098	NA	119.2	NA	10,220	31.4	7	1,022	2,040 ⁽²⁾	NA	NA	NA	28.6 ⁽²⁾	NA	NA	10,220	NA

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds

Samples analyzed using EPA SW 846 Method 8260

µg/L = micrograms per liter

E = result is estimated NA = Not Applicable

⁽¹⁾ cis-1,2-Dichloroethylene and trans-1,2-Dichloroethylene results are combined

⁽²⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Health Evaluation by Office

of Environmental Response, July 1996.

⁽³⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L.)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2629E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	2-Hexanone	Hexachlorobutadiene	Iodomethane	Isopropylbenzene	p-Isopropyltoluene	Methylene chloride	Methyl-ethyl-ketone (MEK)	Methyl-tert-butyl ether (MTBE)	Paraldehyde	4-Methyl-2-pentanone (MIBK)	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Tetrachloroethane	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane		
MW-1	3/3/2004	10.5-15.5	50320557	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS		
MW-2	3/3/2004	12-17	50320565	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS		
MW-10-1	3/28/1994	7-17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
MW-10-1	10/5/1994	7-17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
MW-10-1	7/14/1995	7-17	W5070191-13	<20	NA	NA	NA	NA	<20	<20	NA	<20	NA	NA	NA	NA	NA	<50	NA	NA	<50	NA	NA		
MW-10-1	2/5/1997	7-17	W7020074-01	<20	NA	NA	NA	NA	<5	<20	NA	<20	NA	NA	NA	NA	NA	<50	NA	NA	<50	NA	NA		
MW-10-1	11/23/1999	7-17	253788	<50	<10	<10	<10	<10	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	<50	NA	<50	<50	<50		
MW-10-1	11/23/1999	7-17	253812	<50	<10	<10	<10	<10	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	<50	NA	<50	<50	<50		
MW-10-1	2/29/2000	7-17	260586	<50	<10	<10	<10	<10	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	<50	NA	<50	<50	<50		
MW-10-1	11/8/2000	7-17	260586	<50	<10	<10	<10	<10	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	<50	NA	<50	<50	<50		
MW-10-1	7/19/2002	7-17	334157	<50	<10	<10	<10	<10	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	<50	NA	<50	<50	<50		
MW-10-1	7/19/2002	7-17	334158	<50	<10	<10	<10	<10	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	<50	NA	<50	<50	<50		
MW-10-1	5/7/2003	7-17	842918	<12.5	<10	<10	<10	<10	<10	<12.5	<10	<10	<10	NA	<10	<10	<10	<10	<10	NA	<10	<10	<10		
MW-10-1	8/22/2003	7-17	872595	<12.5	<10	<10	<10	<10	<10	<12.5	<10	<10	<10	NA	<10	<10	<10	<10	<10	NA	<10	<10	<10		
MW-10-1R	12/03/2003	7-17	503002107	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA	<10	<10	<10	<10	<10	NA	<10	<10	<10		
MW-10-1R	12/03/2003	7-17	503002115	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA	<10	<10	<10	<10	<10	NA	<10	<10	<10		
MW-10-1R	3/1/2004	7-17	503237240	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA	<10	<10	<10	<10	<10	NA	<10	<10	<10		
MW-10-1R	3/1/2004	7-17	503237257	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA	<10	<10	<10	<10	<10	NA	<10	<10	<10		
MW-10-1R	6/4/2004	7-17	503492829	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA	<10	<10	<10	<10	<10	NA	<10	<10	<10		
MW-10-1R	6/4/2004	7-17	503492928	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA	<10	<10	<10	<10	<10	NA	<10	<10	<10		
MW-132	9/1/1992	10-20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
MW-132	5/27/1993	10-20	69681	<200	NA	<200	NA	<200	<200	<200	NA	<200	NA	NA	NA	<20	NA	<20	<200	NA	<20	NA	<20		
MW-132	7/14/1995	10-20	W5070191-06	<20	NA	NA	NA	NA	<20	<20	NA	<20	NA	NA	NA	<20	NA	<20	<200	NA	<20	NA	<20		
MW-132	2/5/1997	10-20	W7020074-02	<500	NA	NA	NA	<500	<500	<500	NA	<500	NA	NA	NA	<120	NA	<120	NA	<120	NA	<120	<120		
MW-132	11/23/1999	10-20	253791	<50	<10	<10	<10	<10	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	NA	<50	<50	<50			
MW-132	2/28/2000	10-20	260589	<50	<10	<10	<10	<10	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	NA	<50	<50	<50			
MW-132	7/22/2002	10-20	334190	<50	<10	<10	<10	<10	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	NA	<50	<50	<50			
MW-132	5/7/2003	10-20	842913	<12.5	<10	<10	<10	<10	<10	<12.5	<10	<10	<10	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10		
MW-132	8/22/2003	10-20	872596	<12.5	<10	<10	<10	<10	<10	<12.5	<10	<10	<10	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10		
MW-132	8/22/2003	10-20	872597	<12.5	<10	<10	<10	<10	<10	<12.5	<10	<10	<10	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10		
MW-132	3/1/2004	10-20	503002123	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10		
MW-132	3/1/2004	10-20	503237166	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10		
MW-132	6/4/2004	10-20	503492647	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10		
MW-133	9/1/1992	8-18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
MW-133	5/27/1993	8-18	69680	<10	NA	<10	NA	<10	<10	<10	NA	<10	NA	NA	<10	<10	<10	<10	<10	NA	<10	<10	<10		
MW-133	7/14/1995	8-18	W5070191-01	<20	NA	<20	NA	<20	<20	<20	NA	<20	NA	NA	<20	<20	<20	<20	NA	<20	<20	<20	<20		
MW-133	2/5/1997	8-18	W7020074-03	<20	NA	<20	NA	<20	<20	<20	NA	<20	NA	NA	<20	<20	<20	<20	NA	<20	<20	<20	<20		
MW-133	11/23/1999	8-18	253798	<50	<10	<10	<10	<10	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	NA	<50	<50	<50	<50		
MW-133	2/28/2000	8-18	260596	<50	<10	<10	<10	<10	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	NA	<50	<50	<50	<50		
MW-133R	12/04/2003	8-18	503002131	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10		
MW-133R	3/1/2004	8-18	503237208	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10		
MW-133R	6/4/2004	8-18	503492704	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10		
Tier II Residential Cleanup Goals - Groundwater ¹⁰				NA	10	NA	689 ²⁰	445 ²⁰	6.30 ²⁰	917.72	45	NA	1.520	1.216	64 ²⁰	NA	5	5	5	NA	1,000	NA	70	200	5
Tier II Non-Residential Cleanup Goals - Groundwater ¹⁰				NA	36.7	NA	10,200 ²⁰	10,200 ²⁰	381 ¹⁰	5,110	715	NA	5,110	4,088	1,020 ²⁰	NA	110	14.3	56.1	NA	20,440	NA	1,022	9,198	50.2

Notes:
10. Revised Cleanup Goals for the YEP Tier II Non-Residential Cleanup Goals
11. Revised Cleanup Goals for the YEP Tier II Residential Cleanup Goals
12. Revised Cleanup Goals for the YEP Tier II Residential Cleanup Goals
See last page for footnotes

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991 004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	2-Hexanone	Heptachlorobenzene	Iodomethane	Isopropylbenzene	p-Isopropyltoluene	Methylene chloride	Methyl-ethyl-ketone (MEK)	Methyl-tert-butyl ether (MTBE)	Paraldehyde	4-Methyl-2-pentanone (MIBK)	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrahydrofuran	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane
NW-135	9/1/992	10-20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NW-135	9/1/992	10-20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NW-135	5/27/1993	10-20	69679	<10	NA	<10	NA	NA	<10	NA	NA	<10	NA	<10	NA	<10	NA	<10	NA	<10	NA	<10	NA	<10
NW-135	7/14/1995	10-20	W5070191-14	<20	NA	NA	NA	NA	<20	NA	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20
NW-135	2/5/1997	10-20	W7020074-04	<20	NA	NA	NA	NA	<20	NA	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20
NW-135	11/23/1999	10-20	253802	<50	<50	<10	<50	<10	<10	<50	<10	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
NW-135	2/29/2000	10-20	280574	<50	<50	<10	<50	<10	<10	<50	<10	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
NW-135	11/8/2000	10-20	280651	<50	<50	<10	<50	<10	<10	<50	<10	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
NW-135	6/20/2001	10-20	296393	<50	<50	<10	<50	<10	<10	<50	<10	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
NW-135	7/15/2002	10-20	324015	<12.5	<50	<50	<10	<50	<10	<50	<10	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
NW-135	12/04/2003	10-20	503002149	<10	<50	<50	<10	<50	<10	<50	<10	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
NW-145	6/4/1993	17.5-27.5	69941	<50	NA	<50	NA	NA	<50	NA	<50	NA	<50	NA	<50	NA	<50	NA	<50	NA	<50	NA	<50	<50
NW-145	7/14/1995	17.5-27.5	W5070191-10	<20	NA	NA	NA	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	<50
NW-145	2/5/1997	17.5-27.5	W7020074-05	<20	NA	NA	NA	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	<50
NW-145	11/23/1999	17.5-27.5	253799	<50	<50	<10	<50	<10	<10	<50	<10	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
NW-145	2/29/2000	17.5-27.5	253813	<50	<50	<10	<50	<10	<10	<50	<10	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
NW-145	6/2/2001	17.5-27.5	296418	<50	<50	<10	<50	<10	<10	<50	<10	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
NW-145	7/22/2002	17.5-27.5	324144	<50	<50	<10	<50	<10	<10	<50	<10	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
NW-145	12/04/2003	17.5-27.5	503002453	<10	<50	<50	<10	<50	<10	<50	<10	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
NW-146	6/4/1993	15-25	69942	<10	NA	<10	NA	NA	<10	NA	<10	NA	<10	NA	<10	NA	<10	NA	<10	NA	<10	NA	<10	<50
NW-146	7/14/1995	15-25	W5070191-11	<20	NA	NA	NA	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	<50
NW-146	2/5/1997	15-25	W7020074-06	<20	NA	NA	NA	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	<50
NW-146	11/23/1999	15-25	253800	<50	<50	<10	<50	<10	<10	<50	<10	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
NW-146	2/29/2000	15-25	296572	<50	<50	<10	<50	<10	<10	<50	<10	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
NW-146	6/2/2001	15-25	296684	<50	<50	<10	<50	<10	<10	<50	<10	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
NW-146	7/15/2002	15-25	324017	<12.5	<50	<50	<10	<50	<10	<50	<10	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
NW-146	12/03/2003	15-25	503002461	<10	<50	<50	<10	<50	<10	<50	<10	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
NW-146	3/1/2004	15-25	503237216	<10	<50	<50	<10	<50	<10	<50	<10	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
NW-146	6/4/2004	15-25	503492738	<10	<50	<50	<10	<50	<10	<50	<10	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
NW-147	6/4/1993	20-30	69943	<10	NA	<10	NA	NA	<10	NA	<10	NA	<10	NA	<10	NA	<10	NA	<10	NA	<10	NA	<10	<50
NW-147	7/14/1995	20-30	W5070191-08	<20	NA	NA	NA	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	<50
NW-147	2/5/1997	20-30	W7020074-07	<20	NA	NA	NA	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	NA	<20	<50
NW-147	11/23/1999	20-30	253790	<50	<50	<10	<50	<10	<10	<50	<10	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
NW-147	2/29/2000	20-30	296588	<50	<50	<10	<50	<10	<10	<50	<10	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
NW-147	11/8/2000	20-30	280685	<50	<50	<10	<50	<10	<10	<50	<10	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
NW-147	6/2/2001	20-30	296409	<50	<50	<10	<50	<10	<10	<50	<10	<50	<50	<10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50

Tier II Residential Cleanup Goals - Groundwater¹¹

Tier II Non-Residential Cleanup Goals - Groundwater¹¹

Revised compound added for YRP Tier II Non-Residential Cleanup Goal

Revised compound added for YRP Tier II Residential Cleanup Goal

See last page for footnotes

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	2-Methylnonane	Hexachlorobutadiene	Iodomethane	Isopropylbenzene	p-Isopropyltoluene	Methylene chloride	Methyl-ethyl-ketone (MEK)	Methyl-tert-butyl ether (MTBE)	Paraldehyde	4-Methyl-2-pentanone (MIBK)	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane
MW-147A	7/22/2002	20-30	324189	<50	<10	<10	<50	<50	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	<50	NA	<50	<50	<50	<50	<50
MW-147A	5/7/2003	20-30	842912	<12.5	<50	<50	<10	<10	<50	<12.5	<50	<12.5	<50	NA	<10	<10	<10	<10	<10	<10	<10	<50	<50	<10	<10
MW-147A	8/22/2003	20-30	872598	<12.5	<50	<50	<10	<10	<50	<12.5	<50	<12.5	<50	NA	<10	<10	<10	<10	<10	<10	<50	<50	<50	<10	<10
MW-147A	12/03/2003	20-30	50200578	<10	<50	<10	<50	<50	<50	<13	<50	<13	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-147A	3/11/2004	20-30	502387158	<10	<50	<10	<50	<50	<50	<13	<50	<13	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-147A	6/4/2004	20-30	502492597	<10	<50	<10	<50	<50	<50	<13	<50	<13	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-148	6/4/1993	10.5-25.5	69944	<800	NA	<800	NA	NA	<800	<800	NA	<800	NA	<800	NA	<80	NA	<80	<800	<800	<800	NA	NA	<80	<800
MW-148	7/14/1995	10.5-25.5	W5070191-07	<20	NA	NA	NA	NA	<5	<20	NA	<20	NA	NA	NA	<50	NA	<50	<50	<50	<50	NA	NA	<50	<50
MW-148	2/5/1997	10.5-25.5	W7020074-08	<20	NA	NA	NA	NA	<50	<20	NA	<20	NA	NA	NA	<50	NA	<50	<50	<50	<50	NA	NA	<50	<50
MW-148	1/12/31/1999	10.5-25.5	253792	<50	<50	<10	<50	<50	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-148	2/28/2000	10.5-25.5	250583	<50	<50	<10	<50	<50	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-148 Dup.	2/28/2000	10.5-25.5	250583	<50	<50	<10	<50	<50	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-148	1/18/2000	10.5-25.5	280686	<50	<50	<10	<50	<50	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-148 Dup.	1/18/2000	10.5-25.5	280686	<50	<50	<10	<50	<50	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-148	6/21/2001	10.5-25.5	296407	<50	<50	<10	<50	<50	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-148 Dup.	6/21/2001	10.5-25.5	296408	<50	<50	<10	<50	<50	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-148	7/22/2002	10.5-25.5	324188	<50	<50	<10	<50	<50	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-148	5/7/2003	10.5-25.5	842914	<12.5	<50	<50	<10	<10	<50	<12.5	<50	<12.5	<50	NA	<10	<10	<10	<10	<10	<10	<10	<50	<50	<10	<10
MW-148	8/22/2003	10.5-25.5	872599	<12.5	<50	<50	<10	<10	<50	<12.5	<50	<12.5	<50	NA	<10	<10	<10	<10	<10	<10	<10	<50	<50	<10	<10
MW-148	12/03/2003	10.5-25.5	502005479	<10	<50	<10	<50	<50	<50	<13	<50	<13	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-148	3/11/2004	10.5-25.5	502387174	<10	<50	<10	<50	<50	<50	<13	<50	<13	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-148	6/4/2004	10.5-25.5	502492654	<10	<50	<10	<50	<50	<50	<13	<50	<13	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-150	7/17/1995	4-19	W507029-01	<20	NA	NA	NA	NA	<50	<20	NA	<20	NA	NA	NA	<50	NA	<50	<50	<50	<50	NA	NA	<50	<50
MW-150	2/5/1997	4-19	W7020074-09	<20	NA	NA	NA	NA	<50	<20	NA	<20	NA	NA	NA	<50	NA	<50	<50	<50	<50	NA	NA	<50	<50
MW-150	1/12/31/1999	4-19	253803	<50	<50	<10	<50	<50	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-150	2/29/2000	4-19	250575	<50	<50	<10	<50	<50	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-150	1/18/2000	4-19	280688	<50	<50	<10	<50	<50	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-150	6/20/2001	4-19	296390	<50	<50	<10	<50	<50	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-150	7/19/2002	4-19	324159	<50	<50	<10	<50	<50	<10	<50	<10	<50	<50	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-150	5/7/2003	4-19	842917	<12.5	<50	<50	<10	<10	<50	<12.5	<50	<12.5	<50	NA	<10	<10	<10	<10	<10	<10	<10	<50	<50	<10	<10
MW-150	8/22/2003	4-19	872600	<12.5	<50	<50	<10	<10	<50	<12.5	<50	<12.5	<50	NA	<10	<10	<10	<10	<10	<10	<10	<50	<50	<10	<10
MW-150	12/03/2003	4-19	502005259	<10	<50	<10	<50	<50	<50	<13	<50	<13	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-150	3/11/2004	4-19	502387232	<10	<50	<10	<50	<50	<50	<13	<50	<13	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
MW-150	6/4/2004	4-19	502492753	<10	<50	<10	<50	<50	<50	<13	<50	<13	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Tier II Residential Cleanup Goals - Groundwater ¹¹				NA	10	NA	689 ¹²	445 ¹³	6.3 ¹⁴	917.72	45	NA	1,520	1,216	64 ¹⁵	NA	5	5	5	NA	1,000	NA	70	200	5
Tier II Non-Residential Cleanup Goals - Groundwater ¹¹				NA	36.7	NA	10,200 ¹²	10,200 ¹³	38 ¹⁴	5,110	715	NA	5,110	4,088	1,020 ¹⁵	NA	110	14.3	56.1	NA	20,440	NA	1,022	9,198	50.2

Exceed compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Exceed compound exceeds the VRP Tier II Residential Cleanup Goal

Exceed compound exceeds the VRP Tier II Groundwater Cleanup Goal

See last page for footnotes

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	2-Methylnonane	Hexachlorobutadiene	Iodomethane	Isopropylbenzene	p-Isopropyltoluene	Methylene chloride	Methyl-ethyl-ketone (MEK)	Methyl-tert-butyl ether (MTBE)	Paraldehyde	4-Methyl-2-pentanone (MIBK)	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	
MW-151	7/14/1995	5-20	W5070191-03	<20	NA	NA	NA	NA	<5	<20	NA	<20	NA	NA	NA	<5.0	NA	<5.0	NA	<5.0	NA	NA	<5.0	
MW-151	2/6/1997	5-20	W7020074-13	<20	NA	NA	NA	NA	<5.0	<20	NA	<20	NA	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-151	11/23/1999	5-20	253809	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-151	2/29/2000	5-20	266579	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-151	1/18/2000	5-20	266589	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-151	6/20/2001	5-20	296388	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-151	12/04/2003	5-20	324114	<12.5	<5.0	<10	<5.0	<5.0	<10	<12.5	<5.0	<12.5	<5.0	NA	NA	<10	<10	<10	NA	<10	NA	NA	<10	
MW-151	7/18/2002	5-20	503002586	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-151	3/5/2004	5-20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5.0	<5.0	NS	NS	NS	NS	NS	
MW-151	3/1/2004	5-20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5.0	<5.0	NS	NS	NS	NS	NS	
MW-151	6/4/2004	5-20	503492951	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-152	7/14/1995	5-20	W5070191-01	<20	NA	NA	NA	NA	<5	<20	NA	<20	NA	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-152	2/5/1997	5-20	W7020074-10	<20	NA	NA	NA	NA	<5.0	<20	NA	<20	NA	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-152	11/23/1999	5-20	253801	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-152	2/29/2000	5-20	266573	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-152	1/18/2000	5-20	280690	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-152	6/20/2001	5-20	296401	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-152	7/15/2002	5-20	324016	<12.5	<5.0	<10	<5.0	<5.0	<10	<12.5	<5.0	<12.5	<5.0	NA	NA	<10	<10	<10	NA	<10	NA	NA	<10	
MW-152	1/20/2002	5-20	503002587	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-152	3/1/2004	5-20	503237224	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-152	6/4/2004	5-20	503492728	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-153	7/14/1995	4.5-19.5	W5070191-02	<20	NA	NA	NA	NA	<5	<20	NA	<20	NA	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-153	2/6/1997	4.5-19.5	W7020074-14	<20	NA	NA	NA	NA	<5.0	<20	NA	<20	NA	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-153 Dup	2/6/1997	4.5-19.5	W7020074-23	<20	NA	NA	NA	NA	<5.0	<20	NA	<20	NA	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-153	11/23/1999	4.5-19.5	265796	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-153	2/28/2000	4.5-19.5	266594	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-153	1/18/2000	4.5-19.5	280691	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-153	6/21/2001	4.5-19.5	296404	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-153 Dup	6/21/2001	4.5-19.5	296405	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-153	7/22/2002	4.5-19.5	324185	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-153	5/7/2003	4.5-19.5	842915	<12.5	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-153(DUP)	5/7/2003	4.5-19.5	842916	<12.5	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-153	8/22/2003	4.5-19.5	872601	<12.5	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-153	12/03/2003	4.5-19.5	503002545	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-153(DUP)	12/03/2003	4.5-19.5	503002545	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-153	3/1/2004	4.5-19.5	503237182	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-153(DUP)	3/1/2004	4.5-19.5	503237182	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-153	6/4/2004	4.5-19.5	503492770	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
MW-153(DUP)	6/4/2004	4.5-19.5	503492766	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	
Tier II Residential Cleanup Goals - Groundwater ¹⁰				NA	10	NA	689 ¹⁰	445 ¹⁰	6,300 ¹⁰	917.72	45	NA	1,520	1,216	64 ¹⁰	NA	5	5	NA	1,000	NA	70	206	5
Tier II Non-Residential Cleanup Goals - Groundwater ¹¹				NA	36.7	NA	10,230 ¹¹	10,200 ¹¹	381 ¹¹	5,110	715	NA	5,110	4,088	1,020 ¹¹	NA	14.3	56.1	NA	20,440	NA	1,022	9,198	50.2

Tier II Non-Residential Cleanup Goals - Groundwater¹¹

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

See last page for footnotes

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	2-Hexanone	Hexachlorobutadiene	Iodomethane	Isopropylbenzene	p-Isopropyltoluene	Methylene chloride	Methyl-ethyl-ketone (MEK)	Methyl-tert-butyl ether (MTBE)	Paraldehyde	4-Methyl-2-pentanone (MIBK)	Naphthalene	n-Propylbenzene	Styrene	1,1,2,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane
NW-154	7/4/1995	5-20	W-5070191-12	<20	NA	NA	NA	NA	<5	<20	NA	<20	NA	NA	NA	<5.0	NA	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-154	2/5/1997	5-20	W-0230074-11	<20	NA	NA	NA	NA	<10	<20	NA	<20	NA	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-154	11/23/1999	5-20	253789	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-154	2/28/2000	5-20	260587	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-154	1/18/2000	5-20	280692	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-154	6/21/2001	5-20	296410	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-154	7/22/2002	5-20	324191	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-154	12/03/2003	5-20	503002560	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-154	3/1/2004	5-20	503237141	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-155	9/11/1995	14-29	W-5090134-02	<200	NA	NA	NA	NA	<5.0	<200	NA	<200	NA	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	NA	<5.0	<5.0
NW-155	2/6/1997	14-29	W-0230074-15	<2,000	NA	NA	NA	NA	<5.0	<2,000	NA	<2,000	NA	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	NA	<5.0	<5.0
NW-155	1/12/1999	14-29	253793	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-155	2/28/2000	14-29	280691	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-155	1/18/2000	14-29	280693	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-155	6/21/2001	14-29	296414	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-155	7/19/2002	14-29	324155	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-156	9/11/1995	5-20	W-02090134-03	<20	NA	NA	NA	NA	<5.0	<20	NA	<20	NA	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	NA	<5.0	<5.0
NW-156	2/6/1997	5-20	W-0230074-16	<20	NA	NA	NA	NA	<5.0	<20	NA	<20	NA	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	NA	<5.0	<5.0
NW-156 Dup	2/6/1997	5-20	W-0230074-24	<20	NA	NA	NA	NA	<5.0	<20	NA	<20	NA	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	NA	<5.0	<5.0
NW-156	1/12/1999	5-20	253807	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-156	2/29/2000	5-20	260577	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-156	1/18/2000	5-20	280694	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-156	6/20/2001	5-20	296402	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-156	7/18/2002	5-20	324116	<12.5	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-156	12/04/2003	5-20	503002594	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-156	3/1/2004	5-20	503518128	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-156	6/11/2004	5-20	503518136	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-157	2/6/1997	5-20	W-0200774-19	<200	NA	NA	NA	NA	<5.0	<200	NA	<200	NA	NA	NA	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	NA	<5.0	<5.0
NW-157 Dup	2/6/1997	5-20	W-020396-91	<20	NA	NA	NA	NA	<5.0	<20	NA	<20	NA	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	NA	<5.0	<5.0
NW-157	2/29/2000	5-20	260581	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-157	1/18/2000	5-20	280695	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-157	6/21/2001	5-20	296411	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-157	7/19/2002	5-20	324153	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-157	12/04/2003	5-20	503002602	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-157	3/1/2004	5-20	503237125	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
NW-157	6/4/2004	5-20	503403256	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	
Tier II Residential Cleanup Goals - Groundwater ¹⁰				NA	10	NA	689 ¹²	445 ¹²	6.30 ¹²	917.72	45	NA	1.520	1.216	64 ¹²	NA	5	5	5	NA	1,000	NA	70	200	5
Tier II Non-Residential Cleanup Goals - Groundwater ¹¹				NA	36.7	NA	10,200 ¹²	10,200 ¹²	381 ¹²	5,110	715	NA	5,110	4,088	1,020 ¹²	NA	110	14.3	56.1	NA	20,440	NA	1,022	9,198	50.2

Detectable compound exceeds the VRP Tier II Non-Residential Cleanup Goal
 Detectable compound exceeds the VRP Tier II Non-Residential Cleanup Goal
 Detectable compound exceeds the VRP Tier II Non-Residential Cleanup Goal
 See last page for footnotes

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	2-Hexanone	Hexachlorobutadiene	Iodomethane	Isopropylbenzene	p-Isopropyltoluene	Methylene chloride	Methyl-ethyl-ketone (MEK)	Methyl-tert-butyl ether (MTBE)	Paraldehyde	4-Methyl-2-pentanone (MIBK)	Naphthalene	m-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane
NW-158	2/6/1997	14-29	W7020074-20	<20	NA	NA	NA	NA	<5.0	<20	NA	NA	<20	NA	NA	<5.0	NA	<5.0	NA	<5.0	NA	NA	NA	<5.0	<5.0
MW-158	14-29	14-29	253794	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-158	2/28/2000	14-29	260592	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-158 Dup.	2/28/2000	14-29	260584	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-158	11/6/2000	14-29	260696	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-158	6/21/2001	14-29	296415	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-158	7/19/2002	14-39	324156	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-159	2/28/2000	NA	260585	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-159	1/7/2000	NA	260697	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-159	6/21/2001	NA	296412	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-159	7/19/2002	Unknown	324152	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-160	3/2/2000	3-13	260551	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-160	11/6/2000	3-13	280698	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-160	6/21/2001	3-13	296417	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-160	7/1/2002	3-13	324027	<12.5	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-160	7/1/2002	3-13	324028	<12.5	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-160 Dup.	7/1/2002	3-13	503002610	<10	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-160	12/04/2003	3-13	503002628	<10	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-160	3/1/2004	3-13	503237281	<10	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-160	6/4/2004	3-13	503401264	<10	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-161	3/2/2000	3-13	260552	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-161	11/6/2000	3-13	280699	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-161	6/21/2001	3-13	296416	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-161	7/18/2002	3-13	324103	<12.5	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-161	12/04/2003	3-13	503002628	<10	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-161	3/1/2004	3-13	503237299	<10	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-161	6/4/2004	3-13	503403272	<10	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-162	11/6/2000	NA	280700	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-162	6/20/2001	NA	296394	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-162	7/18/2002	10-20	324118	<12.5	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-163	11/6/2000	NA	280701	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-163	6/20/2001	NA	296395	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-163	7/18/2002	6-16	324117	<12.5	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-163 Dup.	7/18/2002	6-16	324119	<12.5	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-164	11/7/2000	16-26	280702	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-164	6/21/2001	16-26	296413	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-164	7/19/2002	16-26	324154	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-164	12/05/2003	16-26	503002636	<10	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-164	3/1/2004	16-26	503237117	<10	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
MW-164	6/4/2004	16-26	503403249	<10	<5.0	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	
Tier II Residential Cleanup Goals - Groundwater ¹⁰				NA	10	NA	689 ¹⁰	445 ¹⁰	630 ¹⁰	917.72	45	NA	1,520	1,216	64 ¹⁰	NA	5	5	5	NA	1,000	NA	70	200	5
Tier II Non-Residential Cleanup Goals - Groundwater ¹¹				NA	36.7	NA	10,230 ¹¹	10,200 ¹¹	381 ¹¹	5,110	715	NA	5,110	4,088	1,020 ¹¹	NA	110	14.3	56.1	NA	20,440	NA	1,022	9,198	50.2

¹⁰ Tier II Non-Residential Cleanup Goals - Groundwater¹¹

¹¹ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

¹² Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

¹³ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

¹⁴ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

¹⁵ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

¹⁶ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

¹⁷ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

¹⁸ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

¹⁹ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

²⁰ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

²¹ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

²² Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

²³ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

²⁴ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

²⁵ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

²⁶ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

²⁷ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

²⁸ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

²⁹ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

³⁰ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

³¹ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

³² Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

³³ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

³⁴ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

³⁵ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

³⁶ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

³⁷ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

³⁸ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

³⁹ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

⁴⁰ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

⁴¹ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	2-Hexanone	Heptachlorobenzene	Iodomethane	Isopropylbenzene	p-Isopropyltoluene	Methylene chloride	Methyl-ethyl-ketone (MEK)	Methyl-tert-butyl ether (MTBE)	Paraldehyde	4-Methyl-2-pentanone (MIBK)	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane
MW-1655	6/1/2001	10-20	294563	<5.0	<5.0	NA	<5.0	<5.0	<10	<5.0	NA	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1655 Dup.	6/1/2001	10-20	294564	<5.0	<5.0	NA	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-165	7/18/2002	10-20	324108	<12.5	<5.0	<5.0	<10	<5.0	<5.0	<12.5	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1655	12/05/2003	10-20	503002644	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1655	3/11/2004	10-20	503237083	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1655	6/3/2004	10-20	503493065	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1655	6/1/2001	10-20	294565	<5.0	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-166	7/18/2002	10-20	324106	<12.5	<5.0	<5.0	<10	<5.0	<5.0	<12.5	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1665	12/19/2003	10-20	503046765	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1665 Dup	12/19/2003	10-20	503046773	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1665	3/11/2004	10-20	503237067	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1665	6/3/2004	10-20	503493033	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1675	6/1/2001	12-22	294566	<5.0	<5.0	NA	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-167	7/17/2002	12-22	324026	<12.5	<5.0	<5.0	<10	<5.0	<5.0	<12.5	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1675	12/04/2003	12-22	503002669	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1675	3/11/2004	12-22	503237109	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1675	6/3/2004	12-22	503493023	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1685	6/1/2001	12-22	294567	<5.0	<5.0	NA	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-168	7/18/2002	12-22	324110	<12.5	<5.0	<5.0	<10	<5.0	<5.0	<12.5	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1685 Dup.	7/18/2002	12-22	324111	<12.5	<5.0	<5.0	<10	<5.0	<5.0	<12.5	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1695	17/02/2002	15-25	312995	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1695	7/17/2002	15-25	324019	<12.5	<5.0	<5.0	<10	<5.0	<5.0	<12.5	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1695	12/04/2003	15-25	503002693	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1695	3/11/2004	15-25	503237042	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1695	6/3/2004	15-25	503493199	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1705	1/31/2002	17-27	313002	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1705 Dup.	1/31/2002	17-27	313003	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1705	7/17/2002	17-27	324023	<12.5	<5.0	<5.0	<10	<5.0	<5.0	<12.5	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
Tier II Residential Cleanup Goals - Groundwater ¹⁰																									
				NA	10	NA	689 ¹⁰	445 ¹⁰	6.30 ¹⁰	9.17 ¹⁰	45	NA	1,520	1,216	64 ¹⁰	NA	5	5	5	5	NA	1,000	NA	70	200
Tier II Non-Residential Cleanup Goals - Groundwater ¹¹																									
				NA	36.7	NA	10,200 ¹¹	10,200 ¹¹	381 ¹¹	5,110	715	NA	5,110	4,088	1,020 ¹¹	NA	110	14.3	56.1	NA	20,440	NA	1,022	9,198	50.2

Detected compound exceed the Tier II Non-Residential Cleanup Goal
Detected compound exceed the Tier II Residential Cleanup Goal
Detected compound is below the Tier II Non-Residential Cleanup Goal
Detected compound is below the Tier II Residential Cleanup Goal

See last page for footnotes

Table 9a - Shallow Monitoring Well Groundwater - VOCs
Page 23 of 32

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	Toluene	Tetrahydrofuran	Tetrachloroethene	1,1,2,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	Styrene	n-Propylbenzene	Naphthalene	4-Methyl-2-pentanone (MIBK)	Paraldehyde	Methyl-tert-butyl ether (MTBE)	Methyl-ethyl-ketone (MEK)	Methylene chloride	p-Isopropyltoluene	Isopropylbenzene	Iodomethane	Hexachlorobutadiene	2-Hexanone	Lab Sample No.
MW-171S	1/30/2002	12-22	312997	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	312997
MW-172S	7/17/2002	12-22	324021	<12.5	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<12.5	<5.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	324021
MW-173S	9/4/2002	15-23	325666	<12.5	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<12.5	<5.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	325666
MW-173S	3/25/2004		503207540	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	503207540
CH11-MW23S (MW133 Dup)	5/27/1993	NA	69678	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA	<10	<10	NA	<10	<10	NA	<10	<10	<10	<10	69678
OB-1	11/29/1999	5-15	253805	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	253805
OB-2	11/29/1999	5-15	253806	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	253806
Tier II Residential Cleanup Goals - Groundwater ¹⁾				NA	10	NA	689 ²⁾	443 ³⁾	630 ²⁾	917.72	45	715	5,110	381 ²⁾	10,200 ²⁾	10,200 ²⁾	689 ²⁾	443 ³⁾	630 ²⁾	917.72	45	715	5,110	381 ²⁾	10,200 ²⁾	10,200 ²⁾
Tier II Non-Residential Cleanup Goals - Groundwater ¹⁾				NA	36.7	NA	10,200 ²⁾	10,200 ²⁾	381 ²⁾	5,110	715	5,110	4,088	1,020 ²⁾	20,440	1,022	20,440	1,022	56.1	NA	20,440	1,022	56.1	NA	20,440	1,022
Excluded compounds exceeds the VRP Tier II Non-Residential Cleanup Goal				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Excluded compounds exceeds the VRP Tier II Residential Cleanup Goal				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Excluded compounds exceeds the VRP Tier II Residential Cleanup Goal				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

VOCs = Volatile Organic Compounds

Samples analyzed using EPA SW-846 Method 8160

µg/L = micrograms per liter

E = result is estimated NA = Not Applicable

¹⁾ cis-1,2-Dichloroethylene and trans-1,2-Dichloroethylene results are combined

²⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Health Evaluation by Office

of Environmental Response, July 1996.

³⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991094
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Trichloroethene	Trichloroethene	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	Vinyl chloride	Xylenes, (Total)
MW-1	3/5/2004	10.5-15.5	503307557	1,000	NS	NS	NS	NS	NS	NS	NS
MW-2	3/5/2004	12-17	503307565	400	NS	NS	NS	NS	NS	NS	NS
MW-10-1	3/28/1994	7-17	NA	800	NA	NA	NA	NA	NA	<100	NA
MW-10-1	10/5/1994	7-17	NA	1,600	NA	NA	NA	NA	NA	<10	<5.0
MW-10-1	7/14/1995	7-17	W5070191-13	1,600	NA	NA	NA	NA	NA	<10	<5.0
MW-10-1	2/5/1997	7-17	W7020074-01	818	NA	NA	NA	NA	NA	<10	<5.0
MW-10-1 Dup	11/25/1999	7-17	253788	1,000	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-10-1	11/25/1999	7-17	253812	1,100	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-10-1	2/29/2000	7-17	260586	960	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-10-1	11/8/2000	7-17	260650	1,100	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-10-1	7/19/2002	7-17	324158	540	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-10-1 Dup	7/19/2002	7-17	324158	650	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-10-1	5/7/2003	7-17	842918	305	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0
MW-10-1	8/22/2003	7-17	872595	450	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0
MW-10-1R	12/03/2003	7-17	5030021107	220	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<10
MW-10-1R Dup	12/03/2003	7-17	503002115	240	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<10
MW-10-1R	3/11/2004	7-17	503237240	230	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<10
MW-10-1R Dup	3/11/2004	7-17	503237257	230	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<10
MW-10-1R	6/4/2004	7-17	503497838	400	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<10
MW-10-1R Dup	6/4/2004	7-17	503497923	290	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<10
MW-112	9/1/1992	10-20	NA	280	NA	NA	NA	NA	NA	1,200	NA
MW-112	5/27/1993	10-20	69681	1,900	<20	<200	NA	NA	<200	<100	<20
MW-112	7/14/1995	10-20	W5070191-09	1,700	NA	NA	NA	NA	<20	600	<5.0
MW-112	2/5/1997	10-20	W7020074-02	15,000	NA	NA	NA	NA	<500	<120	<120
MW-112	11/25/1999	10-20	253791	270	<5.0	<5.0	<5.0	<5.0	<10	500	<5.0
MW-112	2/28/2000	10-20	260589	2,900	<5.0	<5.0	<5.0	<5.0	<10	13	<5.0
MW-112	7/22/2002	10-20	324190	110	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<5.0
MW-112	5/7/2003	10-20	842913	187	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0
MW-112	8/22/2003	10-20	872596	40.9	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0
MW-112	12/03/2003	10-20	503001123	23	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<10
MW-112	3/11/2004	10-20	503237166	9.3	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<10
MW-112	6/4/2004	10-20	503497647	12	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<10
MW-113	9/1/1992	8-18	NA	47	NA	NA	NA	NA	<10	<10	NA
MW-113	5/27/1993	8-18	69680	34	<1.0	<10	NA	NA	<10	6.8	<1.0
MW-113	9/11/1995	8-18	W5070134-01	3	NA	NA	NA	NA	<20	<10	<5.0
MW-113	2/5/1997	8-18	W7020074-03	53	NA	NA	NA	NA	<20	<10	<5.0
MW-113	11/25/1999	8-18	253798	57	<5.0	<5.0	<5.0	<5.0	<10	7	<5.0
MW-113	2/28/2000	8-18	260596	810	<5.0	<5.0	<5.0	<5.0	<10	6.7	<5.0
MW-113R	12/04/2003	8-18	503002131	<5.0	<5.0	<5.0	<5.0	<5.0	<10	3.3	<10
MW-113R	3/11/2004	8-18	503237208	5.3	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<10
MW-113R	6/4/2004	8-18	503497704	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<10
Tier II Residential Cleanup Goals - Groundwater ¹³⁷											
				5	1,300 ¹³⁸	NA	13,700 ¹³⁹	13,700 ¹³⁹	NA	2	10,000
Tier II Non-Residential Cleanup Goals - Groundwater ¹³⁷											
				260	30,700 ¹⁴⁰	NA	5,110 ¹⁴¹	5,110 ¹⁴¹	NA	10	204,400

¹³⁷ Exceeded compound exceeds the VRP Tier II Non-Residential Cleanup Goal

¹³⁸ Exceeded compound exceeds the VRP Tier II Residential Cleanup Goal

¹³⁹ Exceeded compound exceeds the VRP Tier II Residential Cleanup Goal

¹⁴⁰ Exceeded compound exceeds the VRP Tier II Residential Cleanup Goal

See last page for footnotes

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991094
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Trichloroethene	Trichloroethane	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	Vinyl chloride	Xylenes, (Total)
MW-135	9/19/92	10-20	NA	<5	NA	NA	NA	NA	NA	<10	NA
MW-135	9/19/92	10-20	NA	<5	NA	NA	NA	NA	NA	<10	NA
MW-135	5/27/1993	10-20	66679	<1.0	<1.0	<1.0	NA	NA	<10	<5	<1.0
MW-135	7/14/1995	10-20	W5070191-14	<5.0	NA	NA	NA	NA	<20	<10	<5.0
MW-135	2/5/1997	10-20	W7020074-04	<5.0	NA	NA	NA	NA	<20	<10	<5.0
MW-135	11/23/1999	10-20	253802	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-135	2/29/2000	10-20	260574	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-135	11/8/2000	10-20	280651	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-135	6/20/2001	10-20	296393	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-135	7/15/2002	10-20	324015	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0
MW-135	12/04/2003	10-20	503002149	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-145	6/4/1993	17.5-27.5	69941	9.8	<5	<5	NA	NA	<50	<20	<5
MW-145	7/14/1995	17.5-27.5	W5070191-10	5.6	NA	NA	NA	NA	<20	<10	<5.0
MW-145	2/5/1997	17.5-27.5	W7020074-05	8.3	NA	NA	NA	NA	<20	<10	<5.0
MW-145	11/23/1999	17.5-27.5	253799	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-145 Dup	11/23/1999	17.5-27.5	253813	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-145	2/29/2000	17.5-27.5	260597	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-145	11/8/2000	17.5-27.5	280652	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-145	6/21/2001	17.5-27.5	296418	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-145	7/22/2002	17.5-27.5	324184	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-145	12/04/2003	17.5-27.5	503002453	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-146	6/4/1993	15-25	69942	8.3	<1.0	<1.0	NA	NA	<5	<1.0	<1.0
MW-146	7/14/1995	15-25	W5070191-11	5.2	NA	NA	NA	NA	<20	<10	<5.0
MW-146	2/5/1997	15-25	W7020074-06	8.3	NA	NA	NA	NA	<20	<10	<5.0
MW-146	11/23/1999	15-25	253800	6.9	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-146	2/29/2000	15-25	260572	8.7	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-146	11/8/2000	15-25	280684	7.8	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-146	6/21/2001	15-25	296419	6.2	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-146	7/15/2002	15-25	324017	24.3	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0
MW-146	12/03/2003	15-25	503002461	4.7	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-146	3/11/2004	15-25	503237216	8.9	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-146	6/4/2004	15-25	503492738	4.6	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-147	6/4/1993	20-30	69943	3.9	<1.0	<1.0	NA	NA	<10	<1.0	<1.0
MW-147	7/14/1995	20-30	W5070191-08	<5.0	NA	NA	NA	NA	<20	<10	<5.0
MW-147	2/5/1997	20-30	W7020074-07	4.1	NA	NA	NA	NA	<20	<10	<5.0
MW-147	11/23/1999	20-30	253790	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-147	2/28/2000	20-30	260588	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-147	11/8/2000	20-30	280683	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-147	6/21/2001	20-30	296409	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
Tier II Residential Cleanup Goals - Groundwater ¹⁷											
				5	1,380 ¹⁸	NA	13,700 ¹⁸	13,700 ¹⁸	NA	2	10,000
Tier II Non-Residential Cleanup Goals - Groundwater ¹⁷											
				260	30,700 ¹⁸	NA	5,110 ¹⁸	5,110 ¹⁸	NA	10	204,400

¹⁷ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

¹⁸ Detected compound exceeds the VRP Tier II Residential Cleanup Goal

¹⁹ Detected compound exceeds the VRP Tier II Residential Cleanup Goal

²⁰ Detected compound exceeds the VRP Tier II Residential Cleanup Goal

See last page for footnotes

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991604
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Trichloroethene	Trichloroethene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,3,5-Trichlorobenzene	Vinyl acetate	Vinyl chloride	Xylenes, (Total)
MW-147A	7/22/2002	26-30	324189	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<5.0
MW-147A	5/7/2003	26-30	842912	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-147A	8/22/2003	26-30	872568	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-147A	12/03/2003	26-30	503402578	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<10
MW-147A	3/11/2004	26-30	503337158	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<10
MW-147A	6/4/2004	26-30	503492597	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<10
MW-148	6/4/1993	10.5-25.5	69944	4,680	880	880	NA	NA	<800	440	480
MW-148	7/14/1995	10.5-25.5	W5070191-07	418	NA	NA	NA	NA	<20	92	<5.0
MW-148	2/5/1997	10.5-25.5	W7020074-08	<5.0	NA	NA	NA	NA	<20	<10	<5.0
MW-148	11/23/1999	10.5-25.5	253792	310	<5.0	<5.0	<5.0	<5.0	<10	200	<5.0
MW-148	2/28/2000	10.5-25.5	260583	300	<5.0	<5.0	<5.0	<5.0	<10	180	<5.0
MW-148 Dup.	2/28/2000	10.5-25.5	260568	400	<5.0	<5.0	<5.0	<5.0	<10	270	<5.0
MW-148	1/18/2000	10.5-25.5	280686	190	<5.0	<5.0	<5.0	<5.0	<10	35	<5.0
MW-148 Dup.	1/18/2000	10.5-25.5	280687	160	<5.0	<5.0	<5.0	<5.0	<10	39	<5.0
MW-148	6/21/2001	10.5-25.5	296407	340	<5.0	<5.0	<5.0	<5.0	<10	50	<5.0
MW-148 Dup.	6/21/2001	10.5-25.5	296408	360	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<5.0
MW-148	7/22/2002	10.5-25.5	324188	170	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-148	5/7/2003	10.5-25.5	842914	56.5	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-148	8/22/2003	10.5-25.5	872569	30.5	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-148	12/03/2003	10.5-25.5	503402579	100	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<10
MW-148	3/11/2004	10.5-25.5	503337174	20	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<10
MW-148	6/4/2004	10.5-25.5	503492584	6.4	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<10
MW-150	7/17/1995	4-19	W5070229-01	63	NA	NA	NA	NA	<20	<10	<5.0
MW-150	2/5/1997	4-19	253803	86	NA	NA	NA	NA	<20	<10	<5.0
MW-150	11/23/1999	4-19	260575	130	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-150	2/29/2000	4-19	280688	120	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-150	1/18/2000	4-19	280688	86	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-150	6/20/2001	4-19	296390	200	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<5.0
MW-150	7/19/2002	4-19	324159	30	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<5.0
MW-150	5/7/2003	4-19	842917	17.1	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-150	8/22/2003	4-19	872600	56.1	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-150	12/03/2003	4-19	503402529	14	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<10
MW-150	3/11/2004	4-19	503337232	30	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<10
MW-150	6/4/2004	4-19	503492753	12	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<10
Tier II Residential Cleanup Goals - Groundwater ¹⁾				5	1,380 ²⁾	NA	13.7 ²⁾	13.7 ²⁾	NA	2	10,000
Tier II Non-Residential Cleanup Goals - Groundwater ¹⁾				260	30,700 ²⁾	NA	5,110 ²⁾	5,110 ²⁾	NA	10	204,400

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal
Detected compound exceeds the VRP Tier II Residential Cleanup Goal
Detected compound exceeds the VRP Tier I Residential Cleanup Goal

See last page for footnotes

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Trichloroethene	Trichlorofluoromethane	1,1,1-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	Vinyl chloride	Xylenes, (Total)
MW-151	7/14/1995	5-20	W5070191.03	<5.0	NA	NA	NA	NA	<20	<10	<5.0
MW-151	2/6/1997	5-20	W7020074.13	<5.0	NA	NA	NA	NA	<20	<10	<5.0
MW-151	11/25/1999	5-20	253809	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-151	2/29/2000	5-20	260579	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-151	1/18/2001	5-20	280689	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-151	6/20/2001	5-20	296598	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-151	7/18/2002	5-20	324114	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-151	12/04/2003	5-20	503002386	5.4	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-151	3/3/2004	5-20	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-151	3/11/2004	5-20	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-151	6/4/2004	5-20	503492951	11	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-152	7/14/1995	5-20	W5070191.01	150	NA	NA	NA	NA	<20	<10	<5.0
MW-152	2/5/1997	5-20	W7020074.10	150	NA	NA	NA	NA	<20	<10	<5.0
MW-152	11/23/1999	5-20	253801	110	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-152	2/29/2000	5-20	260573	180	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-152	1/18/2001	5-20	280690	180	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-152	6/20/2001	5-20	296401	340	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-152	7/15/2002	5-20	324016	110	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-152	12/03/2003	5-20	503002537	79	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-152	3/11/2004	5-20	503377224	36	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-152	6/4/2004	5-20	503492720	36	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-153	7/14/1995	4.5-19.5	W5070191.02	270	NA	NA	NA	NA	<20	23	<5.0
MW-153	2/6/1997	4.5-19.5	W7020074.14	154	NA	NA	NA	NA	<20	<10	<5.0
MW-153 Dup	2/6/1997	4.5-19.5	W7020074.23	<5.0	NA	NA	NA	NA	<20	<10	<5.0
MW-153	11/23/1999	4.5-19.5	253796	330	<5.0	<5.0	<5.0	<5.0	<10	89	<5.0
MW-153	2/28/2000	4.5-19.5	260584	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-153	1/18/2001	4.5-19.5	280661	250	<5.0	<5.0	<5.0	<5.0	<10	596	<5.0
MW-153	6/21/2001	4.5-19.5	296404	73	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-153 Dup	6/21/2001	4.5-19.5	296405	<5.0	73	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-153	7/22/2002	4.5-19.5	324215	290	<5.0	<5.0	<5.0	<5.0	<10	65	<5.0
MW-153	5/7/2003	4.5-19.5	842915	384	<5.0	<5.0	<5.0	<5.0	<10	1.1	<1.0
MW-153 Dup	5/7/2003	4.5-19.5	842916	384	<5.0	<5.0	<5.0	<5.0	<10	1.1	<1.0
MW-153	8/22/2003	4.5-19.5	872601	707	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-153 Dup	8/22/2003	4.5-19.5	872601	707	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-153	12/03/2003	4.5-19.5	503002345	420	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-153 Dup	12/03/2003	4.5-19.5	503002345	420	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-153	3/11/2004	4.5-19.5	503002552	440	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-153 Dup	3/11/2004	4.5-19.5	503002552	440	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-153	6/4/2004	4.5-19.5	503257182	480	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-153 Dup	6/4/2004	4.5-19.5	503257182	480	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-153	6/4/2004	4.5-19.5	503492570	620	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-153 Dup	6/4/2004	4.5-19.5	503492570	620	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-153	6/4/2004	4.5-19.5	503492596	630	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-153 Dup	6/4/2004	4.5-19.5	503492596	630	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾											
				5	1,380 ⁽²⁾	NA	13.7 ⁽²⁾	13.7 ⁽²⁾	NA	2	10,000
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾											
				260	30,700 ⁽²⁾	NA	5,110 ⁽²⁾	5,110 ⁽²⁾	NA	10	204,400

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Densified compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2629E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Trichloroethene	Trichlorofluoromethane	1,1,2-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	Vinyl chloride	Xylenes, (Total)
MW-154	7/14/1995	5-20	W5070319112	<5.0	NA	NA	NA	NA	<20	<10	<5.0
MW-154	25/1997	5-20	W702007411	<5.0	NA	NA	NA	NA	<20	<10	<5.0
MW-154	11/23/1999	5-20	253789	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-154	2/28/2000	5-20	260587	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-154	11/8/2000	5-20	280692	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-154	6/21/2001	5-20	296610	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-154	7/22/2002	5-20	324191	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-154	12/03/2003	5-20	503002560	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-154	3/11/2004	5-20	503237141	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-155	9/11/1995	14-29	W5090134102	<5.0	NA	NA	NA	NA	<200	248	<5.0
MW-155	2/6/1997	14-29	W702007415	<5.0	NA	NA	NA	NA	<2,000	3,406	<5.0
MW-155	11/23/1999	14-29	253793	<5.0	<5.0	<5.0	<5.0	<5.0	<10	266	<5.0
MW-155	2/28/2000	14-29	260591	<5.0	<5.0	<5.0	<5.0	<5.0	<10	170 E	<5.0
MW-155	11/8/2000	14-29	280693	<5.0	<5.0	<5.0	<5.0	<5.0	<10	66	<5.0
MW-155	6/21/2001	14-29	296614	<5.0	<5.0	<5.0	<5.0	<5.0	<10	22	<5.0
MW-155	7/19/2002	14-29	324155	<5.0	<5.0	<5.0	<5.0	<5.0	<10	48	<5.0
MW-155	9/11/1995	5-20	W5090134103	288	58	NA	NA	NA	<20	<10	<5.0
MW-155	2/6/1997	5-20	W702007416	58	NA	NA	NA	NA	<20	<10	<5.0
MW-156 Dup	2/6/1997	5-20	W702007424	86	NA	NA	NA	NA	<20	<10	<5.0
MW-156	11/23/1999	5-20	253807	46	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-156	2/29/2000	5-20	260577	46	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-156	11/8/2000	5-20	280694	190	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-156	6/20/2001	5-20	296602	79	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-156	7/18/2002	5-20	324116	292	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0
MW-156	12/04/2003	5-20	503002594	256	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-156	3/11/2004	5-20	503237133	330	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-156	6/11/2004	5-20	503518128	24	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-156 DUP	6/11/2004	5-20	503518136	22	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-157	2/6/1997	5-20	W702007419	60	NA	NA	NA	NA	<200	<100	<5.0
MW-157 Dup	2/26/1997	5-20	W702039601	100	NA	NA	NA	NA	<20	<10	<5.0
MW-157	2/29/2000	5-20	260581	100	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-157	11/8/2000	5-20	280695	120	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-157	6/21/2001	5-20	296611	65	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-157	7/19/2002	5-20	324153	99	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
MW-157	12/04/2003	5-20	503002602	106	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-157	3/11/2004	5-20	503237125	118	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-157	6/4/2004	5-20	503493256	18	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
Tier II Residential Cleanup Goals - Groundwater ¹²				5	1,300 ¹²	NA	13.7 ¹²	13.7 ¹²	NA	2	10,000
Tier II Non-Residential Cleanup Goals - Groundwater ¹³				260	30,700 ¹³	NA	5,110 ¹³	5,110 ¹³	NA	10	204,400

¹² Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal
¹³ Detected compound exceeds the VRP Tier II Residential Cleanup Goal
¹⁴ Detected compound is below the VRP Tier II Residential Cleanup Goal

See last page for footnotes

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ng/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Trichloroethene	Trichloroethene	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	Vinyl chloride	Xylenes, (Total)
MW-158	2/6/1997	14-29	W7020074-20	<5.0	NA	NA	NA	NA	<2.0	<1.0	<5.0
MW-158	11/23/1999	14-29	253794	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-158	2/28/2000	14-29	260592	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-158 Dup.	2/28/2000	14-29	260584	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-158	11/8/2000	14-29	260696	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-158	6/11/2001	14-29	296415	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-158	7/19/2002	14-29	324156	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-159	2/28/2000	NA	260585	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-159	11/7/2000	NA	280697	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-159	6/21/2001	NA	296412	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-159	7/19/2002	Unknown	324152	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-160	3/2/2000	3-13	260551	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-160	11/8/2000	3-13	280698	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-160	6/21/2001	3-13	296417	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-160	7/17/2002	3-13	324027	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<5.0	<5.0
MW-160 Dup.	7/17/2002	3-13	324028	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<5.0	<5.0
MW-160	12/04/2003	3-13	503002610	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<1.0
MW-160	3/11/2004	3-13	503237281	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<1.0
MW-160	6/4/2004	3-13	503493264	400	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<1.0
MW-161	3/2/2000	3-13	260552	170	<5.0	<5.0	<5.0	<5.0	<1.0	8.2	<5.0
MW-161	11/8/2000	3-13	280699	4300	<5.0	<5.0	<5.0	<5.0	<1.0	570	<5.0
MW-161	6/21/2001	3-13	296416	2700	<5.0	<5.0	<5.0	<5.0	<1.0	170	<5.0
MW-161	7/18/2002	3-13	324103	2400	<1.0	<5.0	<1.0	<1.0	<5.0	120	<1.0
MW-161	12/04/2003	3-13	503002628	53	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<1.0
MW-161	3/11/2004	3-13	503237299	200	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<1.0
MW-161	6/4/2004	3-13	503493272	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<1.0
MW-162	11/8/2000	NA	280700	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-162	6/20/2001	NA	296394	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-162	7/18/2002	10-20	324118	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0
MW-163	11/8/2000	NA	280701	1600	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-163	6/20/2001	NA	296395	1800	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-163	7/18/2002	6-16	324117	1650	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0
MW-163 Dup.	7/18/2002	6-16	324119	1600	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0
MW-164	11/7/2000	16-26	280702	18	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-164	6/21/2001	16-26	296413	11	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-164	7/19/2002	16-26	324154	17	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-164	12/05/2003	16-26	503002636	21	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<1.0
MW-164	3/11/2004	16-26	503237117	20	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<1.0
MW-164	6/4/2004	16-26	503493249	10	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<1.0
Tier II Residential Cleanup Goals - Groundwater ¹¹				5	1,300 ¹²	NA	13,7 ¹²	13,7 ¹²	NA	2	10,000
Tier II Non-Residential Cleanup Goals - Groundwater ¹⁰				260	30,700 ¹³	NA	5,110 ¹²	5,110 ¹²	NA	10	204,400

¹⁰ Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

¹¹ Detected compound exceeds the VRP Tier II Residential Cleanup Goal

¹² Detected compound below the VRP Tier II Residential Cleanup Goal

See last page for footnotes

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Trichloroethene	Trichloroethene	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	Vinyl chloride	Xylenes, (Total)
MW-165S	6/1/2001	10-20	294563	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<2.0	<5.0
MW-165S Dup.	6/1/2001	10-20	294564	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<2.0	<5.0
MW-165	7/18/2002	10-20	324108	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	36.6	<1.0
MW-165S	12/05/2003	10-20	503002644	<5.0	<5.0	<5.0	<5.0	<5.0	<10	10	<10
MW-165S	3/11/2004	10-20	503237083	<5.0	<5.0	<5.0	<5.0	<5.0	<10	13.4	<10
MW-165S	6/9/2004	10-20	503493066	<5.0	<5.0	<5.0	<5.0	<5.0	<10	6.4	<10
MW-166S	6/1/2001	10-20	294565	<5.0	<5.0	<5.0	<5.0	<5.0	NA	43	<5.0
MW-166	7/18/2002	10-20	324106	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	15.9	<1.0
MW-166S	12/19/2003	10-20	503046765	<5.0	<5.0	<5.0	<5.0	<5.0	<10	8	<10
MW-166S DUP	12/19/2003	10-20	503046773	<5.0	<5.0	<5.0	<5.0	<5.0	<10	7.9	<10
MW-166S	3/11/2004	10-20	503237067	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<10
MW-166S	6/9/2004	10-20	503493033	<5.0	<5.0	<5.0	<5.0	<5.0	<10	17	<10
MW-167S	6/1/2001	12-22	294566	<5.0	<5.0	<5.0	<5.0	<5.0	NA	11	<5.0
MW-167	7/17/2002	12-22	324026	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<2.0	<1.0
MW-167S	12/04/2003	12-22	503002669	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-167S	3/11/2004	12-22	503237109	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-167S	6/9/2004	12-22	503493223	<5.0	<5.0	<5.0	<5.0	<5.0	<10	3.4	<1.0
MW-168S	6/1/2001	12-22	294567	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<2.0	<5.0
MW-168	7/18/2002	12-22	324110	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	4.9	<1.0
MW-168S Dup.	7/18/2002	12-22	324111	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	4.3	<1.0
MW-169S	1/00/2002	15-25	312995	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<5.0
MW-169S	7/17/2002	15-25	324019	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	1.3	<1.0
MW-169S	12/04/2003	15-25	503002663	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-169S	3/11/2004	15-25	503237042	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-169S	6/9/2004	15-25	503493199	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<1.0
MW-170S	1/31/2002	17-27	313602	<5.0	<5.0	<5.0	<5.0	<5.0	<10	6.4	<5.0
MW-170S Dup.	1/31/2002	17-27	313603	<5.0	<5.0	<5.0	<5.0	<5.0	<10	6.1	<5.0
MW-170S	7/17/2002	17-27	324023	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	2.3	<1.0
Tier II Residential Cleanup Goals - Groundwater ¹³											
				5	1,380 ¹⁴	NA	13,7 ¹⁴	13,7 ¹⁴	NA	2	10,000
Tier II New Residential Cleanup Goals - Groundwater ¹⁵											
				260	30,700 ¹⁶	NA	5,110 ¹⁶	5,110 ¹⁶	NA	10	204,400

See last page for footnotes

Table 9a
Shallow Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6591004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	Vinyl chloride	Xylenes, (Total)
MW-171S	1/30/2002	12-22	312997	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<2.0	<5.0
MW-171S	7/17/2002	12-22	324021	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0
MW-172S	9/4/2002	15-25	327656	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0
MW-173S	3/5/2004		503207540	NS	NS	NS	NS	NS	NS	NS	NS
CH151-SW235 (MW11.5 Dup)	5/27/1993	NA	69678	<1.0	<1.0	<1.0	NA	NA	<10	<5	<1.0
OB-1	11/23/1999	5-15	253805	870	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
OB-2	11/23/1999	5-15	253805	800	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0
Tier II Residential Cleanup Goals - Groundwater ¹⁾				5	1,380 ²⁾	NA	13,7 ²⁾	13,7 ²⁾	NA	2	10,000
Tier II Non-Residential Cleanup Goals - Groundwater ¹⁾				260	30,700 ²⁾	NA	5,110 ²⁾	5,110 ²⁾	NA	10	204,400
Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal											
Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal											
Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal											

VOCs = Volatile Organic Compounds
Samples analyzed using EPA SW-846 Method 8260

µg/L = micrograms per liter

NS = result is estimated NA = Not Applicable

¹⁾ 1,2-Dichloroethylene and trans-1,2-Dichloroethene results are combined

²⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Health Evaluation by Office

of Environmental Response, July 1996.

³⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 9b
Shallow Monitoring Well Groundwater Analytical Results for PAHs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (ghi) perylene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Fluoranthene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene	
MW-10-1	7/19/2002	7-17	324157	<1.02	<1.02	<1.02	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<1.02	<0.20	<2.04	<1.02	<0.20	
MW-10-1 Dup	7/19/2002	7-17	324158	<1.02	<1.02	<1.02	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<1.02	<0.20	<2.04	<1.02	<0.20	
MW-10-1R	12/03/2003	7-17	503002107	<1.0	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.10	<1.0	<1.0	<1.0	
MW-10-1R/DUP	12/03/2003	7-17	503002115	<1.0	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.10	<1.0	<1.0	<1.0	
MW-132	7/22/2002	10-20	324190	<1.01	<1.01	<1.01	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<1.01	<0.20	<2.02	<1.01	<0.20	
MW-132	12/03/2003	10-20	503002123	<1.0	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.10	<1.0	<1.0	<1.0	
MW-133R	12/04/2003	8-18	503002131	<1.0	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.10	<1.0	<1.0	<1.0	
MW-135	6/20/2001	10-20	296393	<18	<10	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.20	<2.1	<0.20	<8.0	<6.4	<2.7	
MW-135	7/15/2002	10-20	324015	<1.02	<1.02	<1.02	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<1.02	<0.20	<2.04	<1.02	<0.20	
MW-135	12/04/2003	10-20	503002149	<1.0	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.10	<1.0	<1.0	<1.0	
MW-145	6/21/2001	17.5-27.5	296418	<18	<10	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.20	<2.1	<0.20	<8.0	<6.4	<2.7	
MW-145	7/22/2002	17.5-27.5	324184	<1.02	<1.02	<1.02	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<1.02	<0.20	<2.04	<1.02	<0.20	
MW-145	12/04/2003	17.5-27.5	503002453	<1.0	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.10	<1.0	<1.0	<1.0	
MW-146	6/21/2001	15-25	296419	<18	<10	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.20	<2.1	<0.20	<8.0	<6.4	<2.7	
MW-146	7/15/2002	15-25	324017	<1.02	<1.02	<1.02	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<1.02	<0.20	<2.04	<1.02	<0.20	
MW-146	12/03/2003	15-25	503002461	<1.0	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.10	<1.0	<1.0	<1.0	
MW-147	6/21/2001	20-30	296409	<18	<10	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.20	<2.1	<0.20	<8.0	<6.4	<2.7	
MW-147A	7/22/2002	20-30	324189	<1.03	<1.03	<1.03	<0.10	<0.20	<0.20	<0.21	<0.20	<0.20	<0.10	<1.03	<0.21	<2.06	<1.03	<0.21	
MW-148	6/21/2001	10.5-25.5	296407	<18	<10	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.20	<2.1	<0.20	<8.0	<6.4	<2.7	
MW-148 Dup.	6/21/2001	10.5-25.5	296408	<18	<10	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.20	<2.1	<0.20	<8.0	<6.4	<2.7	
MW-148	7/22/2002	10.5-25.5	324188	<1.03	<1.03	<1.03	<0.10	<0.20	<0.20	<0.21	<0.20	<0.20	<0.10	<1.03	<0.21	<2.06	<1.03	<0.21	
MW-148	12/03/2003	10.5-25.5	503002479	<1.0	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.10	<1.0	<1.0	<1.0	
MW-150	6/20/2001	4-19	296390	<18	<10	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.20	<2.1	<0.20	<8.0	<6.4	<2.7	
MW-150	7/19/2002	4-19	324159	<1.01	<1.01	<1.01	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<1.01	<0.20	<2.02	<1.01	<0.20	
MW-150	12/03/2003	4-19	503002529	<1.0	<1.0	<0.10	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<1.01	<0.20	<2.02	<1.01	<0.20	
MW-151	6/20/2001	5-20	296398	<18	<10	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.20	<2.1	<0.20	<8.0	<6.4	<2.7	
MW-151	7/18/2002	5-20	324114	<1.02	<1.02	<1.02	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<1.02	<0.20	<2.04	<1.02	<0.20	
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				1,824	6,89 ⁽²⁾	9,120	0.10	0.20	0.20	38.4 ⁽²⁾	0.20	0.20	0.30	243.2	1,216	0.40	1,216	230 ⁽³⁾	912
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				6,132	2,040 ⁽²⁾	30,660	10	10	10	613 ⁽²⁾	39.2	381.8	10	817.6	4,088	10	4,088	230 ⁽³⁾	3,066

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

PAHs = Polynuclear Aromatic Hydrocarbons

μg/L = micrograms per liter

NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

⁽³⁾ Tier I Health Protective Levels for Phenanthrene, Iodomethane and Acrolein Technical Memo by Indiana Voluntary Remediation Program, dated 4/21/98. The given value is a residential cleanup goal (non-residential cleanup goal is not available).

Table 9b
Shallow Monitoring Well Groundwater Analytical Results for PAHs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (ghi) perylene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Fluoranthene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
MW-152	6/20/2001	5-20	296401	<18	<10	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.20	<2.1	<2.1	<0.20	<6.4	<2.7
MW-152	7/15/2002	5-20	324016	<1.02	<1.02	<1.02	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<0.20	<2.04	<1.02	<0.20
MW-152	12/03/2003	5-20	503002537	<1.0	<1.0	<6.6	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<2.1	<0.20	<0.20	<6.4	<2.7
MW-153	6/21/2001	4.5-19.5	296404	<18	<10	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.20	<2.1	<0.20	<0.20	<6.4	<2.7
MW-153 Dup.	6/21/2001	4.5-19.5	296405	<18	<10	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.20	<2.1	<0.20	<0.20	<6.4	<2.7
MW-153	7/22/2002	4.5-19.5	324185	<1.01	<1.01	<1.01	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<0.20	<2.02	<1.01	<0.20
MW-153	12/03/2003	4.5-19.5	503002545	<1.0	<1.0	<6.6	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<0.20	<0.20	<1.0	<1.0
MW-153 DUP	12/03/2003	4.5-19.5	503002552	<1.0	<1.0	<6.6	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<0.20	<0.20	<1.0	<1.0
MW-154	6/21/2001	5-20	296410	<18	<10	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.20	<2.1	<0.20	<0.20	<6.4	<2.7
MW-154	7/22/2002	5-20	324191	<1.02	<1.02	<1.02	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<0.20	<2.04	<1.02	<0.20
MW-154	12/03/2003	5-20	503002560	<1.0	<1.0	<6.6	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<0.20	<0.20	<1.0	<1.0
MW-155	6/21/2001	14-29	296414	<18	<10	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.20	<2.1	<0.20	<0.20	<6.4	<2.7
MW-155	7/19/2002	14-29	324155	<1.01	<1.01	<1.01	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<0.20	<2.02	<1.01	<0.20
MW-156	6/20/2001	5-20	296402	<18	<10	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.20	<2.1	<0.20	<0.20	<6.4	<2.7
MW-156	7/18/2002	5-20	324116	<1.02	<1.02	<1.02	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<0.20	<2.04	<1.02	<0.20
MW-157	6/21/2001	5-20	296411	<18	<10	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.20	<2.1	<0.20	<0.20	<6.4	<2.7
MW-157	7/19/2002	5-20	324153	<1.01	<1.01	<1.01	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<0.20	<2.02	<1.01	<0.20
MW-158	6/21/2001	14-29	296415	<18	<10	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.20	<2.1	<0.20	<0.20	<6.4	<2.7
MW-158	7/19/2002	14-29	324156	<1.02	<1.02	<1.02	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<0.20	<2.04	<1.02	<0.20
MW-159	6/21/2001	NA	296412	<18	<10	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.20	<2.1	<0.20	<0.20	<6.4	<2.7
MW-159	7/19/2002	Unknown	324152	<1.72	<1.72	<1.72	<0.10	<0.20	<0.20	<0.34	<0.20	<0.20	<0.17	0.57	<1.72	<0.34	<1.72	<0.34
MW-160	6/21/2001	3-13	296417	<18	<10	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.20	<2.1	<0.20	<0.20	<6.4	<2.7
MW-160	7/17/2002	3-13	324027	<1.00	<1.00	<1.00	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<0.20	<2.00	<1.00	<0.20
MW-160 Dup.	7/17/2002	3-13	324028	<1.00	<1.00	<1.00	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<0.20	<2.00	<1.00	<0.20
MW-161	6/21/2001	3-13	296416	<18	<10	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.20	<2.1	<0.20	<0.20	<6.4	<2.7
MW-161	7/18/2002	3-13	324103	<1.00	<1.00	<1.00	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<0.20	<2.00	<1.00	<0.20
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				1,824	6,89 ⁽²⁾	9,120	0.10	0.20	0.20	38.4 ⁽²⁾	0.20	0.20	0.30	243.2	1,216	0.40	1,216	912
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				6,132	2,040 ⁽²⁾	30,660	10	10	10	613 ⁽²⁾	39.2	391.8	10	817.6	4,088	10	4,088	3,066

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

PAHs = Polynuclear Aromatic Hydrocarbons

μg/L = micrograms per liter

NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

⁽³⁾ Tier I Health Protective Levels for Phenanthrene, Iodomethane and Acrolein Technical Memo by Indiana Voluntary Remediation Program, dated 4/21/98. The given value is a residential cleanup goal (non-residential cleanup goal is not available).

Table 9b
Shallow Monitoring Well Groundwater Analytical Results for PAHs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (ghi) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (ah) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
MW-162	6/20/2001	NA	296394	<18	<10	<6.6	0.27	0.32	0.46	<0.76	<0.20	<0.20	0.43	<2.1	<2.1	0.33	<8.0	<6.4	<2.7
MW-162	7/18/2002	10-20	324118	<102	<102	<1.02	0.14	0.23	0.24	0.22	<0.20	<0.20	<0.10	0.26	<1.02	<0.20	<2.04	<1.02	0.26
MW-163	6/20/2001	NA	296395	<18	<10	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.20	<2.1	<2.1	<0.20	<8.0	<6.4	<2.7
MW-163	7/18/2002	6-16	324117	<102	<102	<1.02	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<1.02	<0.20	<2.04	<1.02	<0.20
MW-163 Dup.	7/18/2002	6-16	324119	<101	<101	<1.01	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<1.01	<0.20	<2.02	<1.01	<0.20
MW-164	6/21/2001	16-26	296413	<18	<10	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.20	<2.1	<2.1	<0.20	<8.0	<6.4	<2.7
MW-164	7/19/2002	16-26	324154	<102	<102	<1.02	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<1.02	<0.20	<2.04	<1.02	<0.20
MW-165S	6/1/2001	10-20	294563	<18	<10	<6.6	<0.13	<0.20	<0.18	<0.76	<0.17	<0.20	<0.30	<2.1	<2.1	<0.43	<8.0	<6.4	<2.7
MW-165S Dup.	6/1/2001	10-20	294564	<18	<10	<6.6	<0.13	<0.20	<0.18	<0.76	<0.17	<0.20	<0.30	<2.1	<2.1	<0.43	<8.0	<6.4	<2.7
MW-165	7/18/2002	10-20	324108	<102	<101	<1.01	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	0.21	<1.01	<0.20	<2.02	<1.01	<0.20
MW-166S	6/1/2001	10-20	294565	<18	<10	<6.6	<0.13	<0.20	<0.18	<0.76	<0.17	<0.20	<0.30	<2.1	<2.1	<0.43	<8.0	<6.4	<2.7
MW-166	7/18/2002	10-20	324106	<100	<100	<1.00	<0.10	<0.20	<0.18	<0.76	<0.17	<0.20	<0.10	<0.20	<1.00	<0.20	<2.00	<1.00	<0.20
MW-167S	6/1/2001	12-22	294566	<18	<10	<6.6	<0.13	<0.20	<0.18	<0.76	<0.17	<0.20	<0.30	<2.1	<2.1	<0.43	<8.0	<6.4	<2.7
MW-167	7/17/2002	12-22	324026	<101	<101	<1.01	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<1.01	<0.20	<2.02	<1.01	<0.20
MW-168S	6/1/2001	12-22	294567	<18	<10	<6.6	<0.13	<0.20	<0.18	<0.76	<0.17	<0.20	<0.30	<2.1	<2.1	<0.43	<8.0	<6.4	<2.7
MW-168	7/18/2002	12-22	324110	<100	<100	<1.00	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<1.00	<0.20	<2.00	<1.00	<0.20
MW-168 Dup.	7/18/2002	12-22	324111	<100	<100	<1.00	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<1.00	<0.20	<2.00	<1.00	<0.20
MW-169S	7/17/2002	15-25	324019	<100	<100	<1.00	0.24	0.76	0.69	0.75	0.37	0.68	0.41	1.21	<1.00	0.43	<2.00	<1.00	0.99
MW-170S	7/17/2002	17-27	324023	<100	<100	<1.00	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<1.00	<0.20	<2.00	<1.00	<0.20
MW-171S	7/17/2002	12-22	324021	<101	<101	<1.01	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<1.01	<0.20	<2.02	<1.01	<0.20
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				1,824	6,89 ⁽²⁾	9,120	0.10	0.20	0.20	38.4 ⁽²⁾	0.20	0.20	0.30	243.2	1,216	0.40	1,216	230 ⁽³⁾	912
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				6,132	2,040 ⁽²⁾	30,660	10	10	10	613 ⁽²⁾	39.2	391.8	10	817.6	4,088	10	4,088	230 ⁽³⁾	3,066

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

PAHs = Polynuclear Aromatic Hydrocarbons

µg/L = micrograms per liter

NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

⁽³⁾ Tier I Health Protective Levels for Phenanthrene, Indomethane and Acrolein Technical Memo by Indiana Voluntary Remediation Program, dated 4/21/98. The given value is a residential cleanup goal (non-residential cleanup goal is not available).

(2) IDEM VRP Interoffice Memo dated on January 26, 1998.

Response, July 1996.

(1) Indian Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental

p/L = micrograms per liter

NA = Not Applicable

Samples analyzed using EPA Method Series 6000/7000

Detected compound is below the VRP Tier II Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Total Arsenic	Total Barium	Total Cadmium	Total Chromium	Total Lead	Total Mercury	Total Selenium	Total Silver
MW-10-1	11/8/2000	7-17	280650	<.5	54	<.5	<10	<.5	5	<.5	8
MW-10-1	7/19/2002	7-17	324157	NA	NA	<.5	<10	<.5	NA	NA	NA
MW-10-1 Dnp.	7/19/2002	7-17	324158	NA	NA	<.5	<10	<.5	NA	NA	NA
MW-10-1R	12/03/2003	7-17	503002107	NA	NA	<.5	<10	<.5	NA	NA	NA
MW-10-1R Dnp.	12/03/2003	7-17	503002115	NA	NA	<.5	<10	<.5	NA	NA	NA
MW-132	12/03/2003	10-20	503002123	NA	NA	<.5	<10	<.5	NA	NA	NA
MW-132R	12/04/2003	8-18	503002131	NA	NA	<.5	<10	<.5	NA	NA	NA
MW-135	11/8/2000	10-20	280651	7	98	<.5	44	<.5	5	<.5	8
MW-135	6/20/2001	10-20	296393	NA	NA	<.5	34	<.5	NA	NA	NA
MW-135	7/15/2002	10-20	324015	NA	NA	<.5	26.7	<10	NA	NA	NA
MW-135	12/04/2003	10-20	503002149	NA	NA	<.5	30.8	<10	NA	NA	NA
MW-145	11/8/2000	17.5-27.5	280652	12	190	<.5	10	<.5	25	<.5	NA
MW-145	6/21/2001	17.5-27.5	296418	NA	NA	<.5	<10	<.5	NA	NA	NA
MW-145	7/22/2002	17.5-27.5	324184	NA	NA	<.5	<10	<.5	NA	NA	NA
MW-145	12/04/2003	17.5-27.5	503002153	NA	NA	<.5	<10	<.5	NA	NA	NA
MW-146	11/8/2000	15-25	280684	43	150	<.5	320	<.5	32	<.5	9
MW-146	6/21/2001	15-25	296419	NA	NA	<.5	190	<.5	NA	NA	NA
MW-146	7/15/2002	15-25	324017	NA	NA	<.5	108	<.5	NA	NA	NA
MW-146	12/03/2003	15-25	503002461	NA	NA	<.5	342	<.5	11.3	NA	NA
MW-146	12/19/2003	15-25	503046732	NA	NA	NA	291	<.5	NA	NA	NA
MW-146 Dnp.	12/19/2003	15-25	503046740	NA	NA	NA	134	<.5	NA	NA	NA
MW-146 DISSOLVED	12/19/2003	15-25	503046757	NA	NA	NA	<10.0	<.5	NA	NA	NA
MW-147	11/8/2000	20-30	280685	9	260	<.5	23	<.5	9	<.5	<.5
MW-147A	6/21/2001	20-30	296409	NA	NA	<.5	10	<.5	25	<.5	NA
MW-147A	7/22/2002	20-30	324189	NA	NA	<.5	<10	<.5	NA	NA	NA
MW-148	11/8/2000	10.5-25.5	280686	<.5	240	<.5	7	<.5	NA	NA	NA
MW-148 Dnp.	11/8/2000	10.5-25.5	280687	<.5	230	<.5	<.5	<.5	NA	NA	NA
MW-148	6/21/2001	10.5-25.5	296407	NA	NA	<.5	<.5	<.5	NA	NA	NA
MW-148	6/21/2001	10.5-25.5	296408	NA	NA	<.5	<.5	<.5	NA	NA	NA
MW-148	7/22/2002	10.5-25.5	324188	NA	NA	<.5	<.5	<.5	NA	NA	NA
MW-148	12/03/2003	10.5-25.5	503002479	NA	NA	<.5	<.5	<.5	NA	NA	NA
MW-150	11/8/2000	4-19	280688	<.5	120	<.5	<.5	<.5	NA	NA	NA
MW-150	6/20/2001	4-19	296390	NA	NA	<.5	<.5	<.5	NA	NA	NA
MW-150	7/19/2002	4-19	324159	NA	NA	<.5	<.5	<.5	NA	NA	NA
MW-150	12/03/2003	4-19	503002529	NA	NA	<.5	<.5	<.5	NA	NA	NA
MW-151	11/8/2000	5-20	280689	<.5	150	<.5	11	<.5	17	<.5	5
MW-151	6/20/2001	5-20	296398	NA	NA	<.5	<.5	<.5	NA	NA	NA
MW-151	7/18/2002	5-20	324114	NA	NA	<.5	<.5	<.5	NA	NA	NA
MW-152	11/8/2000	5-20	280690	9	76	<.5	<.5	<.5	13	<.5	<.5
MW-152	6/20/2001	5-20	296401	NA	NA	<.5	<.5	<.5	7.6	<.5	NA
MW-152	7/15/2002	5-20	324016	NA	NA	<.5	<.5	<.5	8.9	<.5	NA
MW-152	12/03/2003	5-20	503002537	NA	NA	<.5	<.5	<.5	NA	NA	NA
MW-153	11/8/2000	4.5-19.5	280691	7	110	<.5	<.5	<.5	7	<.5	<.5
MW-153	6/21/2001	4.5-19.5	296404	NA	NA	<.5	<.5	<.5	NA	NA	NA
MW-153 Dnp.	6/21/2001	4.5-19.5	296405	NA	NA	<.5	<.5	<.5	NA	NA	NA
MW-153	7/22/2002	4.5-19.5	324185	NA	NA	<.5	<.5	<.5	NA	NA	NA
MW-153	12/03/2003	4.5-19.5	503002545	NA	NA	<.5	<.5	<.5	NA	NA	NA
MW-153 Dnp.	12/03/2003	4.5-19.5	503002552	NA	NA	<.5	<.5	<.5	NA	NA	NA
MW-154	11/8/2000	5-20	280692	<.5	110	<.5	<.5	<.5	<.5	<.5	<.5
MW-154	6/21/2001	5-20	296410	NA	NA	<.5	<.5	<.5	NA	NA	NA
MW-154	12/03/2003	5-20	503002560	NA	NA	<.5	<.5	<.5	NA	NA	NA
MW-154	7/22/2002	5-20	324191	NA	NA	<.5	<.5	<.5	NA	NA	NA
MW-155	11/8/2000	14-29	280693	28	230	<.5	48	<.5	100	<.5	<.5
MW-155	6/21/2001	14-29	296414	NA	NA	<.5	<.5	<.5	NA	NA	NA
MW-155	7/19/2002	14-29	324155	NA	NA	<.5	<.5	<.5	8.3	<.5	NA
MW-156	11/8/2000	5-20	280694	7	46	<.5	7	<.5	13	<.5	<.5
MW-156	6/20/2001	5-20	296402	NA	NA	<.5	<.5	<.5	NA	NA	NA
MW-156	7/18/2002	5-20	324116	NA	NA	<.5	<.5	<.5	NA	NA	NA
MW-157	11/8/2000	5-20	280695	7	10	<.5	<.5	<.5	6	<.5	6
MW-157	6/21/2001	5-20	296411	NA	NA	<.5	<.5	<.5	NA	NA	NA
MW-157	7/19/2002	5-20	324153	NA	NA	<.5	<.5	<.5	NA	NA	NA

Shallow Monitoring Well Groundwater Analytical Results for Metals (ug/L)
Table 9c
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Table 9c
Shallow Monitoring Well Groundwater Analytical Results for Metals (ug/L)

Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Arsenic	Barium	Cadmium	Chromium	Total Lead	Mercury	Selenium	Total Silver
MW-158	11/8/2000	14-29	280696	15	390	<.5	<.5	62	<.5	220	17
MW-158	6/21/2001	14-29	296415	NA	NA	<.5	<.5	NA	NA	NA	NA
MW-158	7/19/2002	14-29	324156	NA	NA	<.5	<.5	NA	NA	NA	NA
MW-159	11/7/2000	Unknown	280697	15	310	<.5	<.5	43	<.5	90	13
MW-159	6/21/2001	Unknown	296412	NA	NA	<.5	<.5	NA	NA	NA	NA
MW-159	7/19/2002	Unknown	324152	NA	NA	<.5	<.5	NA	NA	NA	NA
MW-160	11/8/2000	3-13	280698	12	26	<.5	<.5	37	<.5	140	<.5
MW-160	6/21/2001	3-13	296417	NA	NA	<.5	<.5	NA	NA	NA	NA
MW-160	7/17/2002	3-13	324027	NA	NA	<.5	<.5	NA	NA	NA	NA
MW-160 Dup.	7/17/2002	3-13	324028	NA	NA	<.5	<.5	NA	NA	NA	NA
MW-161	11/8/2000	3-13	280699	17	300	<.5	<.5	25	<.5	74	<.5
MW-161	6/21/2001	3-13	296416	NA	NA	<.5	<.5	NA	NA	NA	NA
MW-161	7/18/2002	3-13	324103	NA	NA	<.5	<.5	NA	NA	NA	NA
MW-162	11/8/2000	NA	280700	6	68	<.5	<.5	7	<.5	7	<.5
MW-162	6/20/2001	NA	296394	NA	NA	<.5	<.5	NA	NA	NA	NA
MW-162	7/18/2002	10-20	324118	NA	NA	<.5	<.5	9	NA	NA	NA
MW-163	11/8/2000	NA	280701	<.5	73	<.5	<.5	NA	NA	NA	<.5
MW-163	6/20/2001	NA	296395	NA	NA	<.5	<.5	6.3	NA	NA	NA
MW-163	7/18/2002	6-16	324117	NA	NA	<.5	<.5	NA	NA	NA	NA
MW-163 Dup.	7/18/2002	6-16	324119	NA	NA	<.5	<.5	NA	NA	NA	NA
MW-164	11/7/2000	16-26	280702	30	280	<.5	<.5	29	54	<.5	8
MW-164	6/21/2001	16-26	296413	NA	NA	<.5	<.5	NA	NA	NA	NA
MW-164	7/19/2002	16-26	324154	NA	NA	<.5	<.5	NA	NA	NA	NA
MW-165	6/1/2001	10-20	294563	NA	NA	<.5	<.5	81	134	NA	NA
MW-165 Dup.	6/1/2001	10-20	294564	NA	NA	<.5	<.5	85	NA	NA	NA
MW-165	7/18/2002	10-20	324108	NA	NA	<.5	<.5	NA	NA	NA	NA
MW-166	6/1/2001	10-20	294565	NA	NA	<.5	<.5	58	149	NA	NA
MW-166	7/18/2002	10-20	324106	NA	NA	<.5	<.5	NA	NA	NA	NA
MW-167	6/1/2001	12-22	294566	NA	NA	<.5	<.5	86	125	NA	NA
MW-167	7/17/2002	12-22	324026	NA	NA	<.5	<.5	NA	NA	NA	NA
MW-168	6/1/2001	12-22	294567	NA	NA	<.5	<.5	95	128	NA	NA
MW-168	7/18/2002	12-22	324110	NA	NA	<.5	<.5	NA	NA	NA	NA
MW-168 Dup.	7/18/2002	12-22	324111	NA	NA	<.5	<.5	NA	NA	NA	NA
MW-169S	1/30/2002	15-25	312995	NA	NA	<.5	<.5	NA	NA	NA	NA
MW-169S	7/17/2002	15-25	324019	NA	NA	<.5	<.5	66	183	NA	NA
MW-170S	1/31/2002	17-27	313002	NA	NA	<.5	<.5	6.3	136	NA	NA
MW-170S Dup.	1/31/2002	17-27	313003	NA	NA	<.5	<.5	7.1	153	NA	NA
MW-170S	7/17/2002	17-27	324023	NA	NA	<.5	<.5	NA	NA	NA	NA
MW-171S	1/30/2002	12-22	312997	NA	NA	<.5	<.5	16	32.3	NA	NA
MW-171S	7/17/2002	12-22	324021	NA	NA	<.5	<.5	NA	NA	NA	NA

Tier II Residential Cleanup Goals - Groundwater⁽¹⁾Tier II Non-Residential Cleanup Goals - Groundwater⁽¹⁾

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal
 Detected compound is below the VRP Tier II Residential Cleanup Goal
 Samples analyzed using EPA Method Series 6000/7000
 ug/L = micrograms per liter
 NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ IDEM VRP Interoffice Memo dated on January 26, 1998.

Table 10a
 Deep Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
 Former General Motors Corporation
 Allison Gas Turbine Division, Plant 10
 Indianapolis, Indiana
 IDEM VRP #6991004
 KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Acetone	Acrolein	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromofluoromethane	Bromomethane	Bromotoluene	Bromomethane	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorobromomethane	Chloroethane	Chloroform	Chloromethane
MW-165D	1/30/2002	42-47	312969	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-165D	7/18/2002	42-47	324109	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<10	<5.0
MW-165D	12/05/2003	42-47	503002651	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-165D	3/11/2004	42-47	503237075	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-165D	6/3/2004	42-47	503493041	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-165D	6/3/2004	42-47	503493041	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-166D	1/31/2002	46-51	313000	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-166D	7/18/2002	46-51	324107	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<10	<5.0
MW-166D	1/6/2004	46-51	503099204	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<10	<5.0
MW-166D Duplicate	1/6/2004	46-51	503099212	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<10	<5.0
MW-166D	3/11/2004	46-51	503237059	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-166D	6/3/2004	46-51	503492977	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-167D	1/31/2002	28-33	313005	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-167D	7/17/2002	28-33	324025	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<10	<5.0
MW-167D	12/04/2003	28-33	503002677	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-167D DUP	12/04/2003	28-33	503002685	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-167D	3/11/2004	28-33	503237091	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-167D	6/3/2004	28-33	503493207	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-168D	1/31/2002	26-31	313004	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-168D	7/18/2002	26-31	324112	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<10	<5.0
MW-169D	1/30/2002	32-37	312996	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-169D	7/17/2002	32-37	324020	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<10	<5.0
MW-169D	12/04/2003	32-37	503002701	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-169D	3/11/2004	32-37	503237034	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-169D	6/3/2004	32-37	503493082	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-170D	1/31/2002	34-39	313001	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-170D	7/17/2002	34-39	324024	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<10	<5.0
MW-171D	1/30/2002	44-49	312998	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-171D	7/17/2002	44-49	324022	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<10	<5.0
MW-172D	9/4/2002	33-38	327654	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<10	<5.0
MW-172D Dup.	9/4/2002	33-38	327655	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<10	<5.0
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				3,040	NA	NA	5	NA	NA	NA	NA	0.289 ⁽²⁾	NA	NA	64 ^(2b)	64 ^(2b)	64 ^(2b)	1,060 ^(2b)	NA	112 ⁽²⁾	NA	23,161	100	NA
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				10,220	NA	NA	98.6	NA	NA	NA	NA	46.1 ^(2b)	NA	NA	1,020 ^(2b)	1,020 ^(2b)	1,020 ^(2b)	10,200 ^(2b)	NA	2,040 ^(2b)	NA	NA	468.9	NA

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Potential compound is below the VRP Tier II Residential Cleanup Goal

See last page for footnotes.

Table 10a
Deep Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991094
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Acetone	Acrolein	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorobromomethane	Chloroethane	Chloroform	Chloromethane
MW-200	7/17/1995	45-50	W5070229-02	<20	NA	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
MW-200	2/5/1997	45-50	W7020074-12	<20	NA	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10
MW-200	11/23/1999	45-50	253804	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-200 Dup	11/23/1999	45-50	253814	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-200	2/29/2000	45-50	260576	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-200 Dup	2/29/2000	45-50	260569	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-200	11/8/2000	45-50	280703	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-200	6/20/2001	45-50	296391	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-200 Dup	6/20/2001	45-50	296392	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-200	7/19/2002	45-50	324160	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-200 Dup	7/19/2002	45-50	324161	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-201	7/14/1995	36-38	W5070191-04	<20	NA	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10
MW-201	2/6/1997	36-38	W7020074-21	<20	NA	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10
MW-201	11/23/1999	36-38	253810	97	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-201	2/29/2000	36-38	260580	106	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-201	11/8/2000	36-38	280705	110	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-201	6/20/2001	36-38	296400	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-201	7/18/2002	36-38	324115	48.6	<50.0	<50.0	<10	<10	<10	<10	<10	<5.0	<10	<10	<10	<10	<10	<10	<10	<5.0	<5.0	<10
MW-202	7/14/1995	33-35	W5070191-05	36	NA	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10
MW-202	2/6/1997	33-35	W7020074-22	<20	NA	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10
MW-202	11/23/1999	33-35	253797	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-202	2/28/2000	33-35	260595	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-202	11/8/2000	33-35	280706	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-202 Dup	11/8/2000	33-35	280707	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-202	6/21/2001	33-35	296406	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-202	7/22/2002	33-35	324187	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				3,040	NA	NA	5	NA	NA	0.289 ⁽²⁾	NA	NA	64 ⁽³⁾	64 ⁽³⁾	64 ⁽³⁾	1,060 ⁽²⁾	NA	112 ⁽²⁾	NA	23,161	100	NA
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				10,220	NA	NA	98.6	NA	NA	46.1 ⁽²⁾	NA	NA	1,020 ⁽²⁾	1,020 ⁽²⁾	1,020 ⁽²⁾	10,200 ⁽²⁾	NA	2,040 ⁽²⁾	NA	NA	488.9	NA

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal
Detected compound is below the VRP Tier II Residential Cleanup Goal
Detected compound is below the VRP Tier II Non-Residential Cleanup Goal

See last page for footnotes.

Table 10a
Deep Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991064
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Acetone	Acrolein	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoforn	Bromomethane	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane
MW-301	2/6/1997	45-50	W7020074-17	<20	NA	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10
MW-301	11/23/1999	45-50	253808	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-301	2/29/2000	45-50	260578	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-301	11/8/2000	45-50	280708	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-301 Dup.	11/8/2000	45-50	280709	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-301	6/20/2001	45-50	296396	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-301 Dup.	6/20/2001	45-50	296397	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-301	7/18/2002	45-50	324113	<20.0	<50.0	<50.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-302	2/6/1997	45-55	W7020074-18	<20	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-302	11/23/1999	45-55	253795	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-302	2/28/2000	45-55	260593	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-302	11/8/2000	45-55	280710	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-302	6/21/2001	45-55	296403	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-302	7/22/2002	45-55	324186	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<10
MW-302	12/03/2003	45-55	503002719	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-302	3/11/2004	45-55	NS	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-302	6/11/2004	45-55	503518110	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				3,040	NA	NA	5	NA	NA	0.289 ⁽²⁾	NA	NA	64 ⁽³⁾	64 ⁽³⁾	64 ⁽³⁾	1,060 ⁽²⁾	NA	112 ⁽¹⁾	NA	23,161	100	NA
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				10,220	NA	NA	98.6	NA	NA	46.1 ⁽²⁾	NA	NA	1,020 ⁽³⁾	1,020 ⁽³⁾	1,020 ⁽³⁾	10,200 ⁽²⁾	NA	2,040 ⁽²⁾	NA	NA	468.9	NA

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds

Samples analyzed using EPA SW-846 Method 8260

ug/L = micrograms per liter

E = result is estimated

NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 10a
Deep Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991094
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	2-Chlorotoluene	4-Chlorotoluene	2-Chloroethyl vinyl ether	1,2-Dibromo-3-chloropropane	1,2-Dibromo-methane (EDB)	Dibromo-methane	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	Dichloro-difluoro-methane	trans-1,4-Dichloro-2-butene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloro-propane	1,3-Dichloro-propane	2,3-Dichloro-propane	1,1-Dichloro-propene	
MW-165D	1/30/2002	42-47	312959	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	7	8.3	<5.0	3	3,900	11	<5.0	<5.0	<5.0	<5.0
MW-165D	7/18/2002	42-47	324109	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<5.0	4.3	<1.0	4.2	2,820	9.9	<1.0	<1.0	<1.0	<1.0	
MW-165D	12/05/2003	42-47	503002651	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	6.2	<5.0	6.7	2,700	13	<5.0	<5.0	<5.0	<5.0	
MW-165D	3/11/2004	42-47	503237075	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	<5.0	<5.0	6.2	2,300	16	<5.0	<5.0	<5.0	<5.0	
MW-165D	6/3/2004	42-47	503493041	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	2,000	8.3	<5.0	<5.0	<5.0	<5.0	
MW-165D	6/3/2004	42-47	503493041	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	2,000	8.3	<5.0	<5.0	<5.0	<5.0	
MW-166D	1/31/2002	46-51	313000	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	6.1	<5.0	6.1	2,000	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-166D	7/18/2002	46-51	324107	<1.0	<5.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	5.1	<1.0	5.1	2,130	3.3	<1.0	<1.0	<1.0	<1.0	
MW-166D	1/6/2004	46-51	503079204	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	2,000	7.9	<5.0	<5.0	<5.0	<5.0	
MW-166D	1/6/2004	46-51	503079212	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	2,100	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-166D Duplicate	1/6/2004	46-51	503237059	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	1,900	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-166D	6/3/2004	46-51	503492977	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	1,900	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-167D	1/31/2002	28-33	313005	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	530	11	<5.0	<5.0	<5.0	<5.0	
MW-167D	7/17/2002	28-33	324025	<1.0	<5.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	274	12.2	<1.0	<1.0	<1.0	<1.0	
MW-167D	12/04/2003	28-33	503002677	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	380	13	<5.0	<5.0	<5.0	<5.0	
MW-167D DUP	12/04/2003	28-33	503002685	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	390	14	<5.0	<5.0	<5.0	<5.0	
MW-167D	3/11/2004	28-33	503237091	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	410	14	<5.0	<5.0	<5.0	<5.0	
MW-167D	6/3/2004	28-33	503493207	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	510	13	<5.0	<5.0	<5.0	<5.0	
MW-168D	1/31/2002	26-31	313004	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	18	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-168D	7/18/2002	26-31	324112	<1.0	<5.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	21	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-169D	1/30/2002	32-37	312996	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-169D	7/17/2002	32-37	324020	<1.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-169D	12/04/2003	32-37	503002701	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-169D	3/11/2004	32-37	503237034	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-169D	6/3/2004	32-37	503493082	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-170D	1/31/2002	34-39	313001	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-170D	7/17/2002	34-39	324024	<1.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-171D	1/30/2002	44-49	312998	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-171D	7/17/2002	44-49	324022	<1.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-172D	9/4/2002	33-38	327654	<1.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-172D Dup.	9/4/2002	33-38	327655	<1.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾																								
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾																								

Distilled compound exceeds the VRP Tier II Non-Residential Cleanup Goal
Distilled compound exceeds the VRP Tier II Residential Cleanup Goal
Distilled compound is below the VRP Tier II Residential Cleanup Goal

See last page for footnotes.

Table 10a - Deep Monitoring Well Groundwater - VOCs
Page 4 of 12

Table 10a
Deep Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	2-Chlorotoluene	4-Chlorotoluene	2-Chloroethyl vinyl ether	1,2-Dibromo-3-chloropropane (EDB)	Dibromo-methane	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	Dichloro-difluoro-methane	trans-1,4-Dichloro-2-butene	1,1-Dichloroethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloro-propane	1,3-Dichloro-propane	2,2-Dichloro-propane	1,1-Dichloro-propene	
MW-200	7/17/1995	45-50	W5070229-02	NA	NA	<10	NA	NA	<10	<10	<10	NA	NA	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	NA	
MW-200	2/5/1997	45-50	W7020074-12	NA	NA	<10	NA	NA	<10	<10	<10	<10	NA	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	NA	
MW-200	11/23/1999	45-50	253804	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-200 Dup	11/23/1999	45-50	253814	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-200	2/29/2000	45-50	260576	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-200 Dup	2/29/2000	45-50	260569	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-200	1/18/2000	45-50	280703	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-200	6/20/2001	45-50	296391	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-200 Dup	6/20/2001	45-50	296392	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-200	7/19/2002	45-50	324160	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-200 Dup	7/19/2002	45-50	324161	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-201	7/14/1995	36-38	W5070191-04	NA	NA	<10	NA	NA	<10	<10	<10	NA	NA	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	NA	
MW-201	2/6/1997	36-38	W7020074-21	NA	NA	<10	NA	NA	<10	<10	<10	NA	NA	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	NA	
MW-201	11/23/1999	36-38	253810	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-201	2/29/2000	36-38	260580	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-201	1/18/2000	36-38	280705	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-201	6/20/2001	36-38	296400	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-201	7/18/2002	36-38	324115	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-202	7/14/1995	33-35	W5070191-05	NA	NA	<10	NA	NA	<10	<10	<10	NA	NA	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	NA	
MW-202	2/6/1997	33-35	W7020074-22	NA	NA	<10	NA	NA	<10	<10	<10	NA	NA	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	NA	
MW-202	11/23/1999	33-35	253797	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-202	2/29/2000	33-35	260595	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-202	1/18/2000	33-35	280706	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-202 Dup	1/18/2000	33-35	280707	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-202	6/21/2001	33-35	296406	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-202	7/22/2002	33-35	324187	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				NA	NA	NA	NA	NA	600	600	75	NA	NA	640	5	7	70	128 ⁽²⁾	NA	NA	0.850 ⁽²⁾	NA
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				NA	NA	NA	NA	NA	9,198	NA	119.2	NA	NA	10,220	31.4	7	1,022	2,040 ⁽²⁾	NA	NA	28.6 ⁽²⁾	NA

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal
 Detected compound exceeds the VRP Tier II Residential Cleanup Goal
 Detected compound is below the VRP Tier II Residential Cleanup Goal

See last page for footnotes.

Table 10a
Deep Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	2-Chlorotoluene	4-Chlorotoluene	1,2-Dichloro-3-chloropropane	1,2-Dibromoethane (EDB)	Dibromo-methane	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	Dichloro-difluoro-methane	trans-1,4-Dichloro-2-butene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloro-propane	1,3-Dichloro-propane	2,2-Dichloro-propane	1,1-Dichloro-propene
MW-301	2/6/1997	45-50	W7020074-17	NA	NA	NA	NA	NA	<10	<10	<10	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	NA
MW-301	11/23/1999	45-50	253808	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-301	2/29/2000	45-50	260578	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-301	11/8/2000	45-50	280708	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-301 Dup.	11/8/2000	45-50	280709	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-301	6/20/2001	45-50	296396	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-301 Dup.	6/20/2001	45-50	296397	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-301	7/18/2002	45-50	324113	<1.0	<1.0	<5.0	<5.0	<10	<10	<10	<10	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-302	2/6/1997	45-55	W7020074-18	NA	NA	NA	NA	NA	<10	<10	<10	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	NA
MW-302	11/23/1999	45-55	253795	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-302	2/28/2000	45-55	260593	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-302	11/8/2000	45-55	280710	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-302	6/21/2001	45-55	296403	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-302	7/22/2002	45-55	324186	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-302	12/03/2003	45-55	503602719	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-302	3/1/2004	45-55	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-302	6/11/2004	45-55	503518110	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				NA	NA	NA	NA	NA	600	600	75	NA	NA	640	5	7	70	128 ⁽²⁾	NA	NA	0.850 ⁽²⁾	NA
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				NA	NA	NA	NA	NA	9,198	NA	119.2	NA	NA	10,220	31.4	7	1,022	2,040 ⁽²⁾	NA	NA	28.6 ⁽²⁾	NA

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds

Samples analyzed using EPA SW-846 Method 8260

pg/L = micrograms per liter

E = result is estimated

NA = Not Applicable

*cis-1,2-Dichloroethylene and trans-1,2-Dichloroethene results are combined

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 10a
Deep Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Is-1,3-Dichloro-propene	trans-1,3-Dichloro-propene	Ethyl Acetate	Ethylbenzene	Ethyl methacrylate	2-Hexanone	Hexachloro-butadiene	Iodomethane	Isopropyl-benzene	p-Isopropyl-toluene	Methylene chloride	Methyl-ethyl-ketone (MEK)	Methyl-tert-butyl ether (MTBE)	4-Methyl-2-pentanone (MIBK)	Naphthalene	Paraldehyde	n-Propyl-benzene	Styrene	1,1,1,2-Tetrachloro-ethane	1,1,2,2-Tetrachloro-ethane	Tetrachloro-ethene
MW-165D	1/30/2002	42-47	312999	<5.0	<5.0	NA	<5.0	<10.0	<50.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-165D	7/18/2002	42-47	324109	<5.0	<5.0	NA	<5.0	<10.0	<50.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-165D	12/05/2003	42-47	503002651	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-165D	3/11/2004	42-47	503237075	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-165D	6/3/2004	42-47	503493041	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-165D	6/3/2004	42-47	503493041	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-166D	7/18/2002	46-51	313000	<5.0	<5.0	NA	<5.0	<10.0	<50.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-166D	7/18/2002	46-51	324107	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-166D	1/6/2004	46-51	503079204	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-166D Duplicate	1/6/2004	46-51	503079212	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-166D	3/11/2004	46-51	503237059	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-166D	6/3/2004	46-51	503492077	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-167D	1/31/2002	28-33	313005	<5.0	<5.0	NA	<5.0	<10.0	<50.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-167D	1/31/2002	28-33	324025	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-167D	7/17/2002	28-33	503002677	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-167D Dup	12/04/2003	28-33	503002685	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-167D	3/11/2004	28-33	503337091	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-167D	6/3/2004	28-33	503493207	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-168D	1/31/2002	26-31	313004	<5.0	<5.0	NA	<5.0	<10.0	<50.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-168D	7/18/2002	26-31	324112	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-169D	1/30/2002	32-37	312996	<5.0	<5.0	NA	<5.0	<10.0	<50.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-169D	7/17/2002	32-37	324020	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-169D	12/04/2003	32-37	503002701	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-169D	3/11/2004	32-37	503237034	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-169D	6/3/2004	32-37	503493082	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-170D	1/31/2002	34-39	313001	<5.0	<5.0	NA	<5.0	<10.0	<50.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-170D	7/17/2002	34-39	324024	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-171D	1/30/2002	44-49	312998	<5.0	<5.0	NA	<5.0	<10.0	<50.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-171D	7/17/2002	44-49	324022	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-172D	9/4/2002	33-38	327654	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-172D Dup.	9/4/2002	33-38	327655	<5.0	<5.0	NA	<5.0	<100	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<10.0	<12.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				NA	NA	NA	700	NA	NA	10	NA	589 ^(b)	NA	630 ⁽²⁾	917.72	45	1,520	1,216	NA	64 ⁽²⁾	NA	5	5	5
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				NA	NA	NA	10,220	NA	NA	36.7	NA	10,200 ^(b)	NA	381 ^(b)	5,110	715	5,110	4,088	NA	1,020 ⁽²⁾	NA	110	14.3	56.1

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal
Detected compound exceeds the VRP Tier II Residential Cleanup Goal
Detected compound is below the VRP Tier II Residential Cleanup Goal

See last page for footnotes.

Table 10a
Deep Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	cis-1,3-Dichloro-propene	trans-1,3-Dichloro-propene	Ethyl Acetate	Ethylbenzene	Ethyl methacrylate	2-Hexanone	Hexachloro-butadiene	Iodomethane	Isopropyl-benzene	p-Isopropyl-toluene	Methylene chloride	Methyl-ethyl-ketone (MEK)	Methyl-tert-butyl ether (MTBE)	4-Methyl-2-pentanone (MIBK)	Naphthalene	Paraldehyde	n-Propyl-benzene	Styrene	1,1,1,2-Tetrachloro-ethane	1,1,2,2-Tetrachloro-ethane	Tetrachloro-ethene	
MW-200	7/17/1995	45-50	W5070229-02	<5.0	<5.0	NA	<5.0	NA	<20	NA	NA	NA	NA	<5.0	<20	NA	<20	NA	NA	NA	<5.0	NA	<5.0	<5.0	
MW-200	2/5/1997	45-50	W7020074-12	<5.0	<5.0	NA	<5.0	NA	<20	NA	NA	NA	NA	<5.0	<20	NA	<20	NA	NA	NA	<5.0	NA	<5.0	<5.0	
MW-200	11/23/1999	45-50	253804	<5.0	<5.0	NA	<5.0	<10	<50	<5.0	<10	<5.0	<5.0	<10	<50	<10	<50	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-200 Dup	11/23/1999	45-50	253814	<5.0	<5.0	NA	<5.0	<10	<50	<5.0	<10	<5.0	<5.0	<10	<50	<10	<50	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-200	2/29/2000	45-50	260576	<5.0	<5.0	NA	<5.0	<10	<50	<5.0	<10	<5.0	<5.0	<10	<50	<10	<50	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-200 Dup.	2/29/2000	45-50	260569	<5.0	<5.0	NA	<5.0	<10	<50	<5.0	<10	<5.0	<5.0	<10	<50	<10	<50	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-200	11/8/2000	45-50	280703	<5.0	<5.0	NA	<5.0	<10	<50	<5.0	<10	<5.0	<5.0	<10	<50	<10	<50	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-200	6/20/2001	45-50	296391	<5.0	<5.0	NA	<5.0	<10	<50	<5.0	<10	<5.0	<5.0	<10	<50	<10	<50	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-200 Dup.	6/20/2001	45-50	296392	<5.0	<5.0	NA	<5.0	<10	<50	<5.0	<10	<5.0	<5.0	<10	<50	<10	<50	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-200	7/19/2002	45-50	324160	<5.0	<5.0	NA	<5.0	<10	<50	<5.0	<10	<5.0	<5.0	<10	<50	<10	<50	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-200 Dup.	7/19/2002	45-50	324161	<5.0	<5.0	NA	<5.0	<10	<50	<5.0	<10	<5.0	<5.0	<10	<50	<10	<50	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-201	7/14/1995	36-38	W5070191-04	<5.0	<5.0	NA	<5.0	NA	<20	NA	NA	NA	NA	<5	<20	NA	<20	NA	NA	NA	<5.0	NA	<5.0	<5.0	
MW-201	2/6/1997	36-38	W7020074-21	<5.0	<5.0	NA	<5.0	NA	<20	NA	NA	NA	NA	<5.0	<20	NA	<20	NA	NA	NA	<5.0	NA	<5.0	<5.0	
MW-201	11/23/1999	36-38	253810	<5.0	<5.0	NA	<5.0	<10	<50	<5.0	<10	<5.0	<5.0	<10	<50	<10	<50	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-201	2/29/2000	36-38	260580	<5.0	<5.0	NA	<5.0	<10	<50	<5.0	<10	<5.0	<5.0	<10	<50	<10	<50	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-201	11/8/2000	36-38	280705	<5.0	<5.0	NA	<5.0	<10	<50	<5.0	<10	<5.0	<5.0	<10	<50	<10	<50	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-201	6/20/2001	36-38	296400	<5.0	<5.0	NA	<5.0	<10	<50	<5.0	<10	<5.0	<5.0	<10	<50	<10	<50	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-201	7/18/2002	36-38	324115	<5.0	<5.0	NA	<5.0	<10	<50	<5.0	<10	<5.0	<5.0	<10	<50	<10	<50	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-202	7/14/1995	33-35	W5070191-05	<5.0	<5.0	NA	<5.0	NA	<20	NA	NA	NA	NA	<5	<20	NA	<20	NA	NA	NA	<5.0	NA	<5.0	<5.0	
MW-202	2/6/1997	33-35	W7020074-22	<5.0	<5.0	NA	<5.0	NA	<20	NA	NA	NA	NA	<5.0	<20	NA	<20	NA	NA	NA	<5.0	NA	<5.0	<5.0	
MW-202	11/23/1999	33-35	253797	<5.0	<5.0	NA	<5.0	<10	<50	<5.0	<10	<5.0	<5.0	<10	<50	<10	<50	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-202	2/28/2000	33-35	260595	<5.0	<5.0	NA	<5.0	<10	<50	<5.0	<10	<5.0	<5.0	<10	<50	<10	<50	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-202	11/8/2000	33-35	280706	<5.0	<5.0	NA	<5.0	<10	<50	<5.0	<10	<5.0	<5.0	<10	<50	<10	<50	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-202 Dup.	11/8/2000	33-35	280707	<5.0	<5.0	NA	<5.0	<10	<50	<5.0	<10	<5.0	<5.0	<10	<50	<10	<50	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-202	6/21/2001	33-35	296406	<5.0	<5.0	NA	<5.0	<10	<50	<5.0	<10	<5.0	<5.0	<10	<50	<10	<50	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-202	7/22/2002	33-35	324187	<5.0	<5.0	NA	<5.0	<10	<50	<5.0	<10	<5.0	<5.0	<10	<50	<10	<50	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	
Tier II Residential Cleanup Goals - Groundwater (1)				NA	NA	NA	700	NA	NA	10	NA	689(1)	NA	630(2)	917.72	45	1,520	1,216	NA	64(2)	NA	5	5	5	5
Tier II Non-Residential Cleanup Goals - Groundwater (1)				NA	NA	NA	10,220	NA	NA	36.7	NA	10,200(1)	NA	381(2)	5,110	715	5,110	4,088	NA	1,020(2)	NA	110	14.3	56.1	56.1
Detected compound exceeds the VPP Tier II Non-Residential Cleanup Goal																									
Detected compound exceeds the VPP Tier II Residential Cleanup Goal																									
Detected compound is below the VPP Tier II Residential Cleanup Goal																									
See last page for footnotes																									

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

See last page for footnotes.

Table 10a
 Deep Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
 Former General Motors Corporation
 Allison Gas Turbine Division, Plant 10
 Indianapolis, Indiana
 IDEM VRP #6991004
 KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	cis-1,3-Dichloro-propene	trans-1,3-Dichloro-propene	Ethyl Acetate	Ethylbenzene	Ethyl methacrylate	2-Hexanone	Hexachloro-butadiene	Iodomethane	Isopropyl-benzene	p-Isopropyl-toluene	Methylene chloride	Methyl-ethyl-ketone (MEK)	Methyl-tert-butyl ether (MTBE)	4-Methyl-2-pentanone (MIBK)	Naphthalene	Paraldehyde	n-Propyl-benzene	Styrene	1,1,1,2-Tetrachloro-ethane	1,1,2,2-Tetrachloro-ethane	Tetrachloro-ethene
MW-301	2/6/1997	45-50	W7020074-17	<5.0	<5.0	NA	<5.0	NA	<20	NA	NA	NA	NA	<5.0	<20	NA	<20	NA	NA	NA	<5.0	NA	<5.0	<5.0
MW-301	11/23/1999	45-50	253808	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	
MW-301	2/29/2000	45-50	260578	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	
MW-301	1/18/2000	45-50	280708	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	
MW-301 Dup.	1/18/2000	45-50	280709	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	
MW-301	6/20/2001	45-50	296396	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	
MW-301 Dup.	6/20/2001	45-50	296397	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	
MW-301	7/18/2002	45-50	324113	<1.0	<1.0	NA	<5.0	<5.0	12.5	<5.0	<5.0	<1.0	<1.0	<5.0	12.5	<5.0	<12.5	<5.0	NA	<1.0	<1.0	<1.0	<1.0	
MW-302	2/6/1997	45-55	W7020074-18	<5.0	<5.0	NA	<5.0	NA	<20	NA	NA	NA	NA	<5.0	<20	NA	<20	NA	NA	<5.0	<5.0	<5.0	<5.0	
MW-302	11/23/1999	45-55	253795	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	
MW-302	2/28/2000	45-55	260593	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	
MW-302	1/18/2000	45-55	280710	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	
MW-302	6/21/2001	45-55	296403	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	
MW-302	7/22/2002	45-55	324186	<5.0	<5.0	NA	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	
MW-302	12/03/2003	45-55	503602719	<5.0	<5.0	NA	<5.0	<100	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-302	3/11/2004	45-55	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-302	6/11/2004	45-55	503518110	<5.0	<5.0	NA	<5.0	<100	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	NA	<5.0	<5.0	<5.0	<5.0	
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				NA	NA	NA	700	NA	NA	10	NA	689 ⁽³⁾	NA	6.30 ⁽²⁾	917.72	45	1,520	1,216	NA	64 ⁽²⁾	NA	5	5	5
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				NA	NA	NA	10,220	NA	NA	36.7	NA	10,200 ⁽³⁾	NA	381 ⁽²⁾	5,110	715	5,110	4,088	NA	1,020 ⁽²⁾	NA	110	14.3	56.1

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds

Samples analyzed using EPA SW-846 Method 8260

µg/L = micrograms per liter

E = result is estimated

NA = Not Applicable

*cis-1,2-Dichloroethylene and trans-1,2-Dichloroethene results are combined

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 10a
Deep Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Tetrahydro-furan	Toluene	1,2,3-Trichloro-benzene	1,2,4-Trichloro-benzene	1,1,1-Trichloro-ethane	1,1,2-Trichloro-ethane	Trichloroethene	Trichlorofluoro-methane	1,2,3-Trichloro-propane	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	Vinyl acetate	Vinyl chloride	Xylenes, (Total)
MW-165D	1/30/2002	42-47	312999	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	1300	<5.0
MW-165D	7/18/2002	42-47	324109	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	971	<1.0
MW-165D	12/05/2003	42-47	503002651	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	980	<1.0
MW-165D	3/11/2004	42-47	503237075	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	840	<1.0
MW-165D	6/3/2004	42-47	503493041	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	400	<1.0
MW-165D	6/3/2004	42-47	503493041	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	400	<1.0
MW-166D	1/31/2002	45-51	313000	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	730	<5.0
MW-166D	7/18/2002	45-51	324107	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	563	<1.0
MW-166D	1/6/2004	45-51	503079204	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	290	<1.0
MW-166D Duplicate	1/6/2004	45-51	503079212	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	190	<1.0
MW-166D	3/11/2004	45-51	503237059	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	410	<1.0
MW-166D	6/3/2004	45-51	503492977	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	340	<1.0
MW-167D	1/31/2002	28-33	313005	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	390	<5.0
MW-167D	7/17/2002	28-33	324025	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	253	<1.0
MW-167D	12/04/2003	28-33	503002677	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	230	<1.0
MW-167D DUJ	12/04/2003	28-33	503002685	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	230	<1.0
MW-167D	3/11/2004	28-33	503237091	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	220	<1.0
MW-167D	6/3/2004	28-33	503493207	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	240	<1.0
MW-168D	1/31/2002	26-31	313004	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0
MW-168D	7/18/2002	26-31	324112	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0
MW-169D	1/30/2002	32-37	312996	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	8.7	<5.0
MW-169D	7/17/2002	32-37	324020	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	6.4	<1.0
MW-169D	12/04/2003	32-37	503002701	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	8.4	<1.0
MW-169D	3/11/2004	32-37	503237034	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	11	<1.0
MW-169D	6/3/2004	32-37	503493082	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	8.7	<1.0
MW-170D	1/31/2002	34-39	313001	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	80	<5.0
MW-170D	7/17/2002	34-39	324024	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	66	<1.0
MW-171D	1/30/2002	44-49	312998	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0
MW-171D	7/17/2002	44-49	324022	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<1.0
MW-172D	9/4/2002	33-38	327654	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<1.0
MW-172D Dup.	9/4/2002	33-38	327655	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<1.0
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				NA	1,000	NA	70	200	5	5	1,380 ⁽²⁾	NA	13,7 ⁽²⁾	13,7 ⁽²⁾	NA	2	10,000
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				NA	20,440	NA	1,022	9,198	50.2	260	30,700 ⁽²⁾	NA	5,110 ⁽²⁾	5,110 ⁽²⁾	NA	10	204,400

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

See last page for footnotes.

Table 10a - Deep Monitoring Well Groundwater - VOCs
Page 11 of 12

Table 10a
Deep Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Tetrahydro-furan	Toluene	1,2,3-Trichloro-benzene	1,2,4-Trichloro-benzene	1,1,1-Trichloro-ethane	1,1,2-Trichloro-ethane	Trichloroethene	Trichlorofluoro-methane	1,2,3-Trichloro-propane	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	Vinyl acetate	Vinyl chloride	Xylenes, (Total)
MW-200	7/17/1995	45-50	W5070229-02	NA	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	<2.0	<1.0	<5.0
MW-200	2/5/1997	45-50	W7020074-12	NA	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	<2.0	<1.0	<5.0
MW-200	1/23/1999	45-50	253804	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-200 Dup	1/23/1999	45-50	253814	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-200	2/29/2000	45-50	260576	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-200 Dup	2/29/2000	45-50	260569	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-200	1/18/2000	45-50	280703	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<5.0
MW-200	6/20/2001	45-50	296391	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<5.0
MW-200 Dup	6/20/2001	45-50	296392	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<5.0
MW-200	7/19/2002	45-50	324160	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<5.0
MW-200 Dup	7/19/2002	45-50	324161	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<5.0
MW-201	7/14/1995	36-38	W5070191-04	NA	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	<2.0	<1.0	<5.0
MW-201	2/6/1997	36-38	W7020074-21	NA	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	<2.0	<1.0	<5.0
MW-201	1/23/1999	36-38	253810	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-201	2/29/2000	36-38	260580	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-201	1/18/2000	36-38	280705	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<5.0
MW-201	6/20/2001	36-38	296400	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<5.0
MW-201	7/18/2002	36-38	324115	NA	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0
MW-202	7/14/1995	33-35	W5070191-05	NA	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	<2.0	<1.0	<5.0
MW-202	2/6/1997	33-35	W7020074-22	NA	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	<2.0	<1.0	<5.0
MW-202	1/23/1999	33-35	253797	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-202	2/28/2000	33-35	260595	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-202	1/18/2000	33-35	280706	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<5.0
MW-202 Dup	1/18/2000	33-35	280707	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<5.0
MW-202	6/21/2001	33-35	296406	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<5.0
MW-202	7/22/2002	33-35	324187	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<2.0	<5.0
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				NA	1,000	NA	70	200	5	5	1,380 ⁽²⁾	NA	13,7 ⁽²⁾	13,7 ⁽²⁾	NA	2	10,000
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				NA	20,440	NA	1,022	9,198	50.2	260	30,700 ⁽²⁾	NA	5,110 ⁽²⁾	5,110 ⁽²⁾	NA	10	204,400

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal
Detected compound exceeds the VRP Tier II Residential Cleanup Goal
Detected compound is below the VRP Tier II Residential Cleanup Goal

See last page for footnotes.

Table 10a
Deep Monitoring Well Groundwater Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERANIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Tetrahydrofuran	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloro-ethane	1,1,2-Trichloro-ethane	Trichloroethene	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	Vinyl chloride	Xylenes, (Total)
MW-301	2/6/1997	45-50	W7020074-17	NA	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	NA	NA	<2.0	<1.0	<5.0
MW-301	1/23/1999	45-50	253808	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-301	2/29/2000	45-50	260578	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-301	1/18/2000	45-50	280708	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-301 Dup.	1/18/2000	45-50	280709	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-301	6/20/2001	45-50	296396	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-301 Dup.	6/20/2001	45-50	296397	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-301	7/18/2002	45-50	324113	NA	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-302	2/6/1997	45-55	W7020074-18	NA	<5.0	NA	NA	<5.0	<5.0	<5.0	NA	NA	NA	<5.0	<1.0	<5.0
MW-302	1/23/1999	45-55	253795	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-302	2/28/2000	45-55	260593	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-302	1/18/2000	45-55	280710	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-302	6/21/2001	45-55	296403	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-302	7/22/2002	45-55	324186	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-302	12/03/2003	45-55	503002719	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
MW-302	3/11/2004	45-55	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-302	6/11/2004	45-55	503518110	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<5.0
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				NA	1,000	NA	70	200	5	5	1,380 ⁽²⁾	NA	13.7 ⁽²⁾	NA	2	10,000
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				NA	20,440	NA	1,022	9,198	50.2	260	30,700 ⁽²⁾	NA	5,110 ⁽²⁾	NA	10	204,400

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal
Detected compound exceeds the VRP Tier II Residential Cleanup Goal
Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds

Samples analyzed using EPA SW 846 Method 8260

µg/L = micrograms per liter

E = result is estimated

NA = Not Applicable

*cis-1,2-Dichloroethylene and trans-1,2-Dichloroethene results are combined

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 10b
Deep Monitoring Well Groundwater Analytical Results for PAHs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (ghi) perylene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
MW-165D	7/18/2002	42-47	324109	<1.00	<1.00	<1.00	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<1.00	<0.20	<2.00	<1.00	<0.20
MW-166D	7/18/2002	46-51	324107	<1.00	<1.00	<1.00	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<1.00	<0.20	<2.00	<1.00	<0.20
MW-167D	7/17/2002	28-33	324025	<2.27	<2.27	<2.27	<0.10	<0.20	1.77	<0.45	<0.20	<0.20	<0.23	<0.45	<2.27	<0.40	<4.54	<2.27	<0.45
MW-168D	7/18/2002	26-31	324112	<1.00	<1.00	<1.00	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<1.00	<0.20	<2.00	<1.00	<0.20
MW-169D	7/17/2002	32-37	324020	<1.00	<1.00	<1.00	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	1.63	<1.00	<0.20	<2.00	<1.00	<0.20
MW-170D	7/17/2002	34-39	324024	<1.00	<1.00	<1.00	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<1.00	<0.20	<2.00	<1.00	<0.20
MW-171D	7/17/2002	44-49	324022	<1.00	<1.00	<1.00	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<1.00	<0.20	<2.00	<1.00	<0.20
MW-200	6/20/2001	45-50	296391	<1.8	<1.0	<6.6	0.35	0.34	0.53	<0.76	0.31	0.57	0.21	<2.1	<2.1	0.34	<8.0	<6.4	<2.7
MW-200 Dup.	6/20/2001	45-50	296392	<1.8	<1.0	<6.6	0.23	0.21	0.34	<0.76	0.21	0.37	<0.20	<2.1	<2.1	0.21	<8.0	<6.4	<2.7
MW-200	8/8/2002	45-50	325265	<1.00	<1.00	<1.00	0.28	0.15	0.35	0.41	<0.20	0.41	0.39	0.87	<1.00	0.25	<2.00	<1.00	0.67
MW-200 Dup.	8/8/2002	45-50	325266	<1.00	<1.00	<1.00	0.13	<0.20	<0.20	0.24	<0.20	0.21	<0.10	0.5	<1.00	<0.20	<2.00	<1.00	0.31
MW-201	6/20/2001	36-38	296400	<1.8	<1.0	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.10	<0.20	<2.1	<0.20	<8.0	<6.4	<2.7
MW-201	7/18/2002	36-38	324115	<1.00	<1.00	<1.00	<0.10	<0.20	<0.20	<0.76	<0.20	<0.20	<0.10	<0.20	<1.00	<0.20	<2.00	<1.00	<0.20
MW-202	6/21/2001	33-35	296406	<1.8	<1.0	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.10	<0.20	<2.1	<0.20	<8.0	<6.4	<2.7
MW-202	7/22/2002	33-35	324187	<1.00	<1.00	<1.00	<0.10	<0.20	<0.20	<0.76	<0.20	<0.20	<0.10	<0.20	<1.00	<0.20	<2.00	<1.00	<0.20
MW-301	6/20/2001	45-50	296396	<1.8	<1.0	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.10	<0.20	<2.1	<0.20	<8.0	<6.4	<2.7
MW-301 Dup.	6/20/2001	45-50	296397	<1.8	<1.0	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.10	<0.20	<2.1	<0.20	<8.0	<6.4	<2.7
MW-301	7/18/2002	45-50	324113	<1.00	<1.00	<1.00	<0.10	<0.20	<0.20	<0.76	<0.20	<0.20	<0.10	<0.20	<1.00	<0.20	<2.00	<1.00	<0.20
MW-302	6/21/2001	45-55	296403	<1.8	<1.0	<6.6	<0.20	<0.20	<0.20	<0.76	<0.20	<0.20	<0.10	<0.20	<2.1	<0.20	<8.0	<6.4	<2.7
MW-302	7/22/2002	45-55	324186	<1.00	<1.00	<1.00	<0.10	<0.20	<0.20	<0.76	<0.20	<0.20	<0.10	<0.20	<1.00	<0.20	<2.00	<1.00	<0.20
Tier II Residential Cleanup Goals - Groundwater (1)				1,824	6,89(2)	9,120	0.10	0.20	0.20	38.4(2)	0.20	0.20	0.30	243.2	1,216	0.40	1,216	230(3)	912
Tier II Non-Residential Cleanup Goals - Groundwater (1)				6,132	2,040(2)	30,660	10	10	10	613(2)	39.2	391.8	10	817.6	4,088	10	4,088	230(3)	3,066

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal
Detected compound exceeds the VRP Tier II Residential Cleanup Goal
Detected compound is below the VRP Tier II Residential Cleanup Goal

PAHs = Polynuclear Aromatic Hydrocarbons

Samples analyzed using EPA SW-846 Method 8310

µg/L = micrograms per liter

NA = Not Applicable

(1) Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Response, July 1996.

(2) Calculated using surrogate toxicity values and Tier II equations.

(3) Tier II Residential Cleanup Goal under Indiana Voluntary Remediation Program.

Table 10b - Deep Monitoring Well Groundwater - PAHs
Page 1 of 1

Table 10c
Deep Monitoring Well Groundwater Analytical Results for Metals (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Total Arsenic	Total Barium	Total Cadmium	Total Chromium	Total Lead	Total Mercury	Total Selenium	Total Silver
MW-165D	1/30/2002	42-47	312999	NA	NA	<1.0	9.6	10.7	NA	NA	NA
MW-165D	7/18/2002	42-47	324109	NA	NA	<5.0	<10.	6	NA	NA	NA
MW-166D	1/31/2002	46-51	313000	NA	NA	<1.0	9.1	14.7	NA	NA	NA
MW-166D	7/18/2002	46-51	324107	NA	NA	<5.0	12	15.6	NA	NA	NA
MW-167D	1/31/2002	28-33	313005	NA	NA	<1.0	6.8	23.5	NA	NA	NA
MW-167D	7/17/2002	28-33	324106	NA	NA	<5.0	20	60	NA	NA	NA
MW-168D	1/31/2002	26-31	313004	NA	NA	<1.0	8.9	22.6	NA	NA	NA
MW-168D	7/18/2002	26-31	324112	NA	NA	<5.0	<10.	6.2	NA	NA	NA
MW-169D	1/30/2002	32-37	312996	NA	NA	<1.0	<2.0	1.8	NA	NA	NA
MW-169D	7/17/2002	32-37	324020	NA	NA	<5.0	<10.	<5.0	NA	NA	NA
MW-170D	1/31/2002	34-39	313001	NA	NA	<1.0	<5.0	4	NA	NA	NA
MW-170D	7/17/2002	34-39	324024	NA	NA	<5.0	14	17.1	NA	NA	NA
MW-171D	1/30/2002	44-49	312998	NA	NA	<1.0	<5.0	6.3	NA	NA	NA
MW-171D	7/17/2002	44-49	324022	NA	NA	<5.0	<10.	<5.0	NA	NA	NA
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾											
				50	2,000	5.0	100	15 ⁽²⁾	2.0	50	152
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾											
Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal				50	7,154	51.1	511	15 ⁽²⁾	6.1	511	511
Detected compound exceeds the VRP Tier II Residential Cleanup Goal											
Detected compound is below the VRP Tier II Residential Cleanup Goal											

Samples analyzed using EPA Method Series 6000/7000

µg/L = micrograms per liter

NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide,

Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ IDEM VRP Interoffice Memo dated on January 26, 1998.

Table 10c
 Deep Monitoring Well Groundwater Analytical Results for Metals (ug/L)
 Former General Motors Corporation
 Allison Gas Turbine Division, Plant 10
 Indianapolis, Indiana
 IDEM VRP #6991004
 KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Total Arsenic	Total Barium	Total Cadmium	Total Chromium	Total Lead	Total Mercury	Total Selenium	Total Silver
MW-200	11/8/2000	45-50	280703	<5.0	37	<5.0	<10.	18	<0.5	<5.0	<5.0
MW-200 Dup.	11/8/2000	45-50	280704	<5.0	42	<5.0	<10.	23	<0.5	<5.0	<5.0
MW-200	6/20/2001	45-50	296391	NA	NA	<5.0	11	87	NA	NA	NA
MW-200 Dup.	6/20/2001	45-50	296392	NA	NA	<5.0	<10.	85	NA	NA	NA
MW-200	7/19/2002	45-50	324160	NA	NA	<5.0	<10.	36.6	NA	NA	NA
MW-200 Dup.	7/19/2002	45-50	324161	NA	NA	<5.0	<10.	27.8	NA	NA	NA
MW-201	11/8/2000	36-38	280705	6	790	<5.0	<10.	11	<0.5	6	<5.0
MW-201	6/20/2001	36-38	296400	NA	NA	<5.0	<10.	<5.0	NA	NA	NA
MW-201	7/18/2002	36-38	324115	NA	NA	<5.0	<10.	<5.0	NA	NA	NA
MW-202	11/8/2000	33-35	280706	9	190	<5.0	<10.	<5.0	<0.5	<5.0	<5.0
MW-202 Dup.	11/8/2000	33-35	280707	10	190	<5.0	<10.	<5.0	<0.5	<5.0	<5.0
MW-202	6/21/2001	33-35	296406	NA	NA	<5.0	<10.	<5.0	NA	NA	NA
MW-202	7/22/2002	33-35	324187	NA	NA	<5.0	<10.	<5.0	NA	NA	NA
Tier II Residential Cleanup Goals - Groundwater ⁽¹⁾				50	2,000	5.0	100	15 ⁽²⁾	2.0	50	152
Tier II Non-Residential Cleanup Goals - Groundwater ⁽¹⁾				50	7,154	51.1	511	15 ⁽²⁾	6.1	511	511

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

Samples analyzed using EPA Method Series 6000/7000

µg/L = micrograms per liter NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide,

Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Response, July 1996

⁽²⁾ IDEM VRP Interoffice Memo dated on January 26, 1998

Table 10c
Deep Monitoring Well Groundwater Analytical Results for Metals (ug/L)
 Former General Motors Corporation
 Allison Gas Turbine Division, Plant 10
 Indianapolis, Indiana
 IDEM VRP #6991004
 KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Screen Interval (feet)	Lab Sample No.	Total Arsenic	Total Barium	Total Cadmium	Total Chromium	Total Lead	Total Mercury	Total Selenium	Total Silver
MW-301	11/8/2000	45-50	280708	6	320	62	<10.	8	<0.5	<5.0	<5.0
MW-301 Dup.	11/8/2000	45-50	280709	<5.0	300	52	<10.	9	<0.5	5	<5.0
MW-301	6/20/2001	45-50	296396	NA	NA	<5.0	<10.	<5.0	NA	NA	NA
MW-301 Dup.	6/20/2001	45-50	296397	NA	NA	<5.0	<10.	<5.0	NA	NA	NA
MW-301	7/18/2002	45-50	324113	NA	NA	<5.0	<10.	<5.0	NA	NA	NA
MW-302	11/8/2000	45-55	280710	<5.0	200	<5.0	<10.	11	<0.5	<5.0	<5.0
MW-302 Dup	11/8/2000	45-55	280711	<5.0	200	<5.0	<10.	10	<0.5	<5.0	<5.0
MW-302	6/21/2001	45-55	296403	NA	NA	<5.0	<10.	<5.0	NA	NA	NA
MW-302	7/22/2002	45-55	324186	NA	NA	<5.0	<10.	8.2	NA	NA	NA
Tier II Residential Cleanup Goals - Groundwater⁽¹⁾											
				50	2,000	5.0	100	15 ⁽²⁾	2.0	50	152
Tier II Non-Residential Cleanup Goals - Groundwater⁽¹⁾											
				50	7,154	51.1	511	15 ⁽²⁾	6.1	511	511

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

Samples analyzed using EPA Method Series 6000/7000

µg/L = micrograms per liter NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide,

Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ IDEM VRP Interoffice Memo dated on January 26, 1998.

Table 11a
Surface Water Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Acetone	Acrolein	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane
ST-1	10/4/1996	NA	W6100112-01	<20	NA	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0
ST-1	2/10/1997	NA	W7020149-02	<20	NA	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0
ST-2	10/4/1996	NA	W6100112-02	<20	NA	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0
ST-2	2/10/1997	NA	W7020149-03	<20	NA	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0
ST-2 Dup.	2/10/1997	NA	W7020149-04	<20	NA	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0
ST-3	10/4/1996	NA	W6100112-03	<20	NA	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0
ST-3	2/10/1997	NA	W7020149-01	<20	NA	NA	<5.0	NA	NA	<5.0	<5.0	<10	NA	NA	NA	<5.0	<5.0	<5.0	<5.0
STA-SW	3/2/2000	NA	260554	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
STB-SW	3/2/2000	NA	260556	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
STC-SW	3/2/2000	NA	260558	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
STD-SW	3/2/2000	NA	260560	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
STE-SW	3/2/2000	NA	260562	<50	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Surface Water Screening Levels				NA	21 ⁽¹⁾	2,600 ⁽¹⁾	46 ⁽²⁾	NA	NA	11,000 ⁽¹⁾	NA	NA	NA	NA	NA	NA	35,200 ⁽¹⁾	130 ⁽²⁾	11,000 ⁽¹⁾

VOCs = Volatile Organic Compounds

µg/L = micrograms per liter NA = Not Applicable

⁽¹⁾ NOAA SQRs 1999.

⁽²⁾ U.S. EPA ECOTOX Thresholds 1996.

Table 11a - Surface Water - VOCs
Page 1 of 5

Table 11a
Surface Water Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Chloroethane	Chloroform	Chloromethane	2-Chlorotoluene	4-Chlorotoluene	2-Chloroethyl vinyl ether	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane (EDB)	Dibromomethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	trans-1,4-Dichloro-2-butene	1,1-Dichloroethane
ST-1	10/4/1996	NA	W6100112-01	<5.0	<5.0	<10	NA	NA	<10	NA	NA	NA	<10	<10	<10	NA	NA	<5.0
ST-1	2/10/1997	NA	W7020149-02	<5.0	<5.0	<10	NA	NA	<10	NA	NA	NA	<10	<10	<10	NA	NA	<5.0
ST-2	10/4/1996	NA	W6100112-02	<5.0	<5.0	<10	NA	NA	<10	NA	NA	NA	<10	<10	<10	NA	NA	<5.0
ST-2	2/10/1997	NA	W7020149-03	<5.0	<5.0	<10	NA	NA	<10	NA	NA	NA	<10	<10	<10	NA	NA	<5.0
ST-2 Dup.	2/10/1997	NA	W7020149-04	<5.0	<5.0	<10	NA	NA	<10	NA	NA	NA	<10	<10	<10	NA	NA	<5.0
ST-3	10/4/1996	NA	W6100112-03	<5.0	<5.0	<10	NA	NA	<10	NA	NA	NA	<10	<10	<10	NA	NA	<5.0
ST-3	2/10/1997	NA	W7020149-01	<5.0	<5.0	<10	NA	NA	<10	NA	NA	NA	<10	<10	<10	NA	NA	<5.0
STA-SW	3/2/2000	NA	260554	<10.	<20	<10.	<5.0	<5.0	<50.	<50.	<5.0	<10.	<5.0	<5.0	<5.0	<10	<50	<5.0
STB-SW	3/2/2000	NA	260556	<10.	<20	<10.	<5.0	<5.0	<50.	<50.	<5.0	<10.	<5.0	<5.0	<5.0	<10	<50	<5.0
STC-SW	3/2/2000	NA	260558	<10.	<20	<10.	<5.0	<5.0	<50.	<50.	<5.0	<10.	<5.0	<5.0	<5.0	<10	<50	<5.0
STD-SW	3/2/2000	NA	260560	<10.	<20	<10.	<5.0	<5.0	<50.	<50.	<5.0	<10.	<5.0	<5.0	<5.0	<10	<50	<5.0
STE-SW	3/2/2000	NA	260562	<10.	<20	<10.	<5.0	<5.0	<50.	<50.	<5.0	<10.	<5.0	<5.0	<5.0	<10	<50	<5.0
Surface Water Screening Levels				NA	28,900 ⁽¹⁾	NA	NA	NA	NA	NA	NA	11,000 ⁽¹⁾	763 ⁽¹⁾	NA	763 ⁽¹⁾	11,000 ⁽¹⁾	NA	47 ⁽²⁾

VOCs = Volatile Organic Compounds

µg/L = micrograms per liter NA = Not Applicable

⁽¹⁾ NOAA SQRTs 1999.

⁽²⁾ U.S. EPA ECOTOX Thresholds 1996.

Table 11a - Surface Water - VOCs
Page 2 of 5

Table 11a
Surface Water Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloropropane	1,3-Dichloropropane	2,2-Dichloropropane	1,1-Dichloropropene	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethylbenzene	Ethyl methacrylate	2-Hexanone	Hexachlorobutadiene	Iodomethane
ST-1	10/4/1996	NA	W6100112-01	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	<5.0	<5.0	<5.0	NA	<20	NA	NA
ST-1	2/10/1997	NA	W7020149-02	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	<5.0	<5.0	<5.0	NA	<20	NA	NA
ST-2	10/4/1996	NA	W6100112-02	<5.0	<5.0	17	<5.0	<5.0	NA	NA	NA	<5.0	<5.0	<5.0	NA	<20	NA	NA
ST-2	2/10/1997	NA	W7020149-03	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	<5.0	<5.0	<5.0	NA	<20	NA	NA
ST-2 Dup.	2/10/1997	NA	W7020149-04	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	<5.0	<5.0	<5.0	NA	<20	NA	NA
ST-3	10/4/1996	NA	W6100112-03	<5.0	<5.0	14	<5.0	<5.0	NA	NA	NA	<5.0	<5.0	<5.0	NA	<20	NA	NA
ST-3	2/10/1997	NA	W7020149-01	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	<5.0	<5.0	<5.0	NA	<20	NA	NA
STA-SW	3/2/2000	NA	260554	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<50.	<5.0	<10.
STB-SW	3/2/2000	NA	260556	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<50.	<5.0	<10.
STC-SW	3/2/2000	NA	260558	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<50.	<5.0	<10.
STD-SW	3/2/2000	NA	260560	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<50.	<5.0	<10.
STE-SW	3/2/2000	NA	260562	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<50.	<5.0	<10.
Surface Water Screening Levels				20,000 ⁽¹⁾	20,000 ⁽¹⁾	11,600 ⁽¹⁾	11,600 ⁽¹⁾	NA	NA	NA	244 ⁽¹⁾	244 ⁽¹⁾	NA	290 ⁽²⁾	NA	NA	NA	NA

VOCs = Volatile Organic Compounds

µg/L = micrograms per liter NA = Not Applicable

⁽¹⁾ NOAA SQRTs 1999.

⁽²⁾ U.S. EPA ECOTOX Thresholds 1996.

Table 11a
Surface Water Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Isopropylbenzene	p-Isopropyltoluene	Methylene chloride	Methyl-ethyl-ketone (MEK)	Methyl-tert-butyl ether (MTBE)	4-Methyl-2-pentanone (MIBK)	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene
ST-1	10/4/1996	NA	W6100112-01	NA	NA	<5.0	<20	NA	<20	NA	NA	<5.0	NA	<5.0	<5.0	<5.0	NA	NA
ST-1	2/10/1997	NA	W7020149-02	NA	NA	<5.0	<20	NA	<20	NA	NA	<5.0	NA	<5.0	<5.0	<5.0	NA	NA
ST-2	10/4/1996	NA	W6100112-02	NA	NA	<5.0	<20	NA	<20	NA	NA	<5.0	NA	<5.0	<5.0	<5.0	NA	NA
ST-2	2/10/1997	NA	W7020149-03	NA	NA	<5.0	<20	NA	<20	NA	NA	<5.0	NA	<5.0	<5.0	<5.0	NA	NA
ST-2 Dup.	2/10/1997	NA	W7020149-04	NA	NA	<5.0	<20	NA	<20	NA	NA	<5.0	NA	<5.0	<5.0	<5.0	NA	NA
ST-3	10/4/1996	NA	W6100112-03	NA	NA	<5.0	<20	NA	<20	NA	NA	<5.0	NA	<5.0	<5.0	<5.0	NA	NA
ST-3	2/10/1997	NA	W7020149-01	NA	NA	<5.0	<20	NA	<20	NA	NA	<5.0	NA	<5.0	<5.0	<5.0	NA	NA
STA-SW	3/2/2000	NA	260554	<5.0	<5.0	<1.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
STB-SW	3/2/2000	NA	260555	<5.0	<5.0	<1.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
STC-SW	3/2/2000	NA	260558	<5.0	<5.0	<1.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
STD-SW	3/2/2000	NA	260560	<5.0	<5.0	<1.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
STE-SW	3/2/2000	NA	260562	<5.0	<5.0	<1.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Surface Water Screening Levels				NA	NA	11,000 ⁽¹⁾	NA	NA	NA	NA	NA	NA	NA	420 ⁽²⁾	120 ⁽²⁾	130 ⁽²⁾	NA	110 ⁽²⁾

VOCs = Volatile Organic Compounds
µg/L = micrograms per liter NA = Not Applicable
⁽¹⁾ NOAA SQRTs 1999.
⁽²⁾ U.S. EPA ECOTOX Thresholds 1996.

Table 11a - Surface Water - VOCs
Page 4 of 5

Table 11a
Surface Water Analytical Results for VOCs (ug/L)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	Vinyl chloride	Xylenes, (Total)
ST-1	10/4/1996	NA	W6100112-01	<5.0	<5.0	<5.0	NA	NA	NA	NA	<20	<10	<5.0
ST-1	2/10/1997	NA	W7020149-02	<5.0	<5.0	<5.0	NA	NA	NA	NA	<20	<10	<5.0
ST-2	10/4/1996	NA	W6100112-02	<5.0	<5.0	<5.0	NA	NA	NA	NA	<20	<10	<5.0
ST-2	2/10/1997	NA	W7020149-03	<5.0	<5.0	<5.0	NA	NA	NA	NA	<20	<10	<5.0
ST-2 Dup.	2/10/1997	NA	W7020149-04	<5.0	<5.0	<5.0	NA	NA	NA	NA	<20	<10	<5.0
ST-3	10/4/1996	NA	W6100112-03	<5.0	<5.0	<5.0	NA	NA	NA	NA	<20	<10	<5.0
ST-3	2/10/1997	NA	W7020149-01	<5.0	<5.0	<5.0	NA	NA	NA	NA	<20	<10	<5.0
STA-SW	3/2/2000	NA	260554	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0
STB-SW	3/2/2000	NA	260556	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0
STC-SW	3/2/2000	NA	260558	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0
STD-SW	3/2/2000	NA	260560	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0
STE-SW	3/2/2000	NA	260562	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.	<5.0	<5.0
Surface Water Screening Levels				62 ⁽²⁾	9,400 ⁽¹⁾	350 ⁽²⁾	11,000 ⁽¹⁾	NA	NA	NA	NA	NA	1.8 ⁽²⁾

VOCs = Volatile Organic Compounds

µg/L = micrograms per liter NA = Not Applicable

⁽¹⁾ NOAA SQRTs 1999.

⁽²⁾ U.S. EPA ECOTOX Thresholds 1996.

Table 11b
Sediment Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Lab Sample No.	Acetone	Acrolein	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane (Methyl Bromide)	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform
STA-SED	3/2/2000	260563	<0.10	<0.25	<0.25	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.020
STB-SED	3/2/2000	260564	<0.10	<0.25	<0.25	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.020
STC-SED	3/2/2000	260565	<0.10	<0.25	<0.25	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.020
STD-SED	3/2/2000	260566	<0.10	<0.25	<0.25	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.020
STE-SED	3/2/2000	260567	<0.10	<0.25	<0.25	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.020
Sediment Screening Levels			NA	NA	NA	0.057 ⁽¹⁾	NA	NA	NA	NA	NA	NA	NA	NA	0.134 ⁽²⁾	NA	0.82 ⁽¹⁾	NA	NA	NA

VOCs = Volatile Organic Compounds

Samples analyzed using EPA SW-846 Method 8260

mg/kg = milligrams per kilogram

⁽¹⁾ U.S. EPA ECOTOX Thresholds 1996.

⁽²⁾ U.S. EPA Region 5 RCRA EDQs 1999.

Table 11b
Sediment Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Lab Sample No.	Chloromethane (Methyl Chloride)	2-Chlorotoluene	4-Chlorotoluene	2-Chloroethyl vinyl ether	1,2-Dibromo-3-Chloropropane	1,2-Dibromoethane	Dibromomethane (Methylene Bromide)	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	trans-1,4-Dichloro-2-butene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethylene	cis-1,2-Dichloroethylene	trans-1,2-Dichloroethene	1,2-Dichloropropane
STA-SED	3/2/2000	260563	<0.010	<0.005	<0.005	<0.050	<0.010	<0.005	<0.010	<0.005	<0.005	<0.005	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
STE-SED	3/2/2000	260564	<0.010	<0.005	<0.005	<0.050	<0.010	<0.005	<0.010	<0.005	<0.005	<0.005	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
STC-SED	3/2/2000	260565	<0.010	<0.005	<0.005	<0.050	<0.010	<0.005	<0.010	<0.005	<0.005	<0.005	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
STD-SED	3/2/2000	260566	<0.010	<0.005	<0.005	<0.050	<0.010	<0.005	<0.010	<0.005	<0.005	<0.005	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
STE-SED	3/2/2000	260567	<0.010	<0.005	<0.005	<0.050	<0.010	<0.005	<0.010	<0.005	<0.005	<0.005	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Sediment Screening Levels			NA	NA	NA	NA	NA	NA	NA	0.34 ⁽¹⁾	1.7 ⁽¹⁾	0.35 ⁽¹⁾	NA	NA	NA	NA	NA	NA	NA	NA

VOCs = Volatile Organic Compounds

Samples analyzed using EPA SW-846 Method 8260

mg/kg = milligrams per kilogram

⁽¹⁾ U.S. EPA ECOTOX thresholds 1996.

⁽²⁾ U.S. EPA Region 5 RCRA EDQs 1995.

Table 11b
Sediment Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Lab Sample No.	1,3-Dichloropropane	2,2-Dichloropropane	1,1-Dichloropropane	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethylbenzene	Ethyl methacrylate	2-Hexanone	Hexachlorobutadiene	Iodomethane	Isopropylbenzene	p-Isopropyltoluene	Methylene chloride	Methyl Ethyl Ketone	Methyl(tert) butyl ether (MTBE)	4-Methyl-2-pentanone (MIBK)	Naphthalene	n-Propylbenzene
STA-SED	3/2/2000	260563	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.050	<0.005	<0.010	<0.005	<0.005	<0.025	<0.050	<0.010	<0.050	<0.005	<0.005
STB-SED	3/2/2000	260564	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.050	<0.005	<0.010	<0.005	<0.005	<0.025	<0.050	<0.010	<0.050	<0.005	<0.005
STC-SED	3/2/2000	260565	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.050	<0.005	<0.010	<0.005	<0.005	<0.025	<0.050	<0.010	<0.050	<0.005	<0.005
STD-SED	3/2/2000	260566	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.050	<0.005	<0.010	<0.005	<0.005	<0.025	<0.050	<0.010	<0.050	<0.005	<0.005
STE-SED	3/2/2000	260567	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.050	<0.005	<0.010	<0.005	<0.005	<0.025	<0.050	<0.010	<0.050	<0.005	<0.005
Sediment Screening Levels			NA	NA	NA	NA	NA	3.6 ⁽¹⁾	NA	NA	NA	NA	NA	NA	1.26 ⁽²⁾	NA	NA	NA	0.48 ⁽¹⁾	NA

VOCs = Volatile Organic Compounds

Samples analyzed using EPA SW-846 Method 8260

mg/kg = milligrams per kilogram

⁽¹⁾ U.S. EPA ECOTOX Thresholds 1996.

⁽²⁾ U.S. EPA Region 5 RCRA EDQLs 1999.

Table 11b
Sediment Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Lab Sample No.	Styrene	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethylene	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethylene	Trichlorofluoromethane	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	Vinyl chloride	Xylenes, Total
STA-SED	3/2/2000	260563	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.010	<0.005
STB-SED	3/2/2000	260564	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.010	<0.005
STC-SED	3/2/2000	260565	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.010	<0.005
STD-SED	3/2/2000	260566	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.010	<0.005
STE-SED	3/2/2000	260567	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.010	<0.005
Sediment Screening Levels			NA	NA	0.94 ⁽¹⁾	0.53 ⁽¹⁾	0.67 ⁽¹⁾	NA	9.2 ⁽¹⁾	0.17 ⁽¹⁾	NA	1.6 ⁽¹⁾	NA	NA	NA	NA	NA	NA	0.025 ⁽¹⁾

VOCs = Volatile Organic Compounds

Samples analyzed using EPA SW-846 Method 8260

mg/kg = milligrams per kilogram

⁽¹⁾ U.S. EPA ECOTOX Thresholds 1996.

⁽²⁾ U.S. EPA Region 5 RCRA EDQs 1999.

Table 12a
Excavation Confirmation Surface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Depth Sampled (feet)	Lab Sample No.	Acetone	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromochloromethane	Bromomethane (Methyl Bromide)	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorobromomethane	Chloroethane	Chloroform	Chloromethane (Methyl Chloride)
A1 Sidewalk 1 Surface	5/1/2001	1.5	291846	<0.100	<0.260	<0.0052	<0.0052	<0.0052	<0.0052	<0.010	<0.0052	<0.0052	<0.0052	<0.100	<0.0052	<0.0052	<0.0052	<0.010	<0.021	<0.010
A1 Sidewalk 2 Surface	5/1/2001	1.5	291849	<0.110	<0.270	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.0057	<0.0057	<0.0057	<0.110	<0.0057	<0.0057	<0.0057	<0.011	<0.023	<0.011
A1 Sidewalk 3 Surface	5/1/2001	1.5	291851	<0.100	<0.260	<0.0052	<0.0052	<0.0052	<0.0052	<0.010	<0.0052	<0.0052	<0.0052	<0.100	<0.0052	<0.0052	<0.0052	<0.010	<0.021	<0.010
A1 Sidewalk 4 Surface	5/1/2001	1.5	291853	<0.110	<0.260	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.0053	<0.0053	<0.0053	<0.110	<0.0053	<0.0053	<0.0053	<0.011	<0.021	<0.011
A1 Sidewalk 5 Surface	5/4/2001	0.2	292259	<0.100	<0.250	<0.0051	<0.0051	<0.0051	<0.0051	<0.010	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.010	<0.020	<0.010
A2 Sidewalk 1 Surface	5/9/2001	0.2	292402	<0.112	<0.6	<0.006	<0.006	<0.006	<0.006	<0.012	<0.006	<0.006	<0.006	<0.12	<0.006	<0.006	<0.006	<0.012	<0.024	<0.012
A2 Sidewalk 2 Surface	5/9/2001	0.2	292404	<0.11	<0.57	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.0057	<0.0057	<0.0057	<0.11	<0.0057	<0.0057	<0.0057	<0.011	<0.023	<0.011
A2 Sidewalk 3 Surface	5/9/2001	0.2	292406	<0.11	<0.57	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.0057	<0.0057	<0.0057	<0.11	<0.0057	<0.0057	<0.0057	<0.011	<0.023	<0.011
A2 Sidewalk 4 Surface	5/9/2001	0.2	292411	<0.112	<0.58	<0.0058	<0.0058	<0.0058	<0.0058	<0.012	<0.0058	<0.0058	<0.0058	<0.12	<0.0058	<0.0058	<0.0058	<0.012	<0.023	<0.012
A2 Sidewalk 5 Surface	5/10/2001	0.2	292569	<0.130	<0.290	<0.0059	<0.0059	<0.0059	<0.0059	<0.012	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.012	<0.024	<0.012
A2 Sidewalk 6 Surface	5/10/2001	0.2	292571	<0.110	<0.280	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.022	<0.011
A2 Sidewalk 7 Surface	5/10/2001	0.2	292573	<0.110	<0.280	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.022	<0.011
A3 Sidewalk 1 Surface	4/10/2001	0.2	290206	<0.109	<0.272	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.022	<0.011
A3 Sidewalk 2 Surface	4/10/2001	0.2	290208	<0.108	<0.269	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.022	<0.011
A3 Sidewalk 3 Surface	4/10/2001	0.2	290211	<0.110	<0.274	<0.0055	<0.0055	<0.0055	<0.0055	<0.011	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.011	<0.022	<0.011
A3 Sidewalk 4 Surface	4/21/2001	0.2	291216	<0.107	<0.268	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.021	<0.011
A3 Sidewalk 5 Surface	4/25/2001	1	291432	<0.111	<0.556	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.0056	<0.0056	<0.0056	<0.111	<0.0056	<0.0056	<0.0056	<0.011	<0.022	<0.011
A3 Sidewalk 6 Surface	4/25/2001	1	291434	<0.110	<0.551	<0.0055	<0.0055	<0.0055	<0.0055	<0.011	<0.0055	<0.0055	<0.0055	<0.110	<0.0055	<0.0055	<0.0055	<0.011	<0.022	<0.011
A3 Sidewalk 7 Surface	4/25/2001	0.2	292257	<0.100	<0.250	<0.0051	<0.0051	<0.0051	<0.0051	<0.010	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.010	<0.020	<0.010
A3 Sidewalk 8 Surface	5/4/2001	0.2	292257	<0.100	<0.250	<0.0051	<0.0051	<0.0051	<0.0051	<0.010	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.010	<0.020	<0.010
A3 Sidewalk 9 Surface	5/4/2001	0.2	292263	<0.110	<0.280	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.022	<0.011
A3 Sidewalk 10 Surface	5/4/2001	0.2	292265	<0.110	<0.280	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.022	<0.011
A4 Sidewalk 1 Surface	5/4/2001	0.2	292247	<0.110	<0.270	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.022	<0.011
A4 Sidewalk 2 Surface	5/4/2001	0.2	292252	<0.110	<0.270	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.022	<0.011
A4 Sidewalk 3 Surface	5/4/2001	0.2	292240	<0.110	<0.280	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.022	<0.011
A5 Sidewalk 1 Surface	5/4/2001	0.2	292240	<0.110	<0.280	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.023	<0.011
A5 Sidewalk 2 Surface	5/4/2001	0.2	292243	<0.110	<0.280	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.023	<0.011
A5 Sidewalk 3 Surface	5/4/2001	0.2	292245	<0.110	<0.260	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.021	<0.011
Tier II Residential Cleanup Goals Surface Soil ⁽¹⁾				1,000	NA	NA	NA	10.3 ⁽²⁾	NA	NA	1,000 ⁽²⁾	1,000 ⁽²⁾	1,000 ⁽²⁾	1,000 ⁽²⁾	NA	1,000 ⁽²⁾	NA	NA	104.92	NA
Tier II Non-Residential Cleanup Goals Surface Soil ⁽¹⁾				1,000	NA	NA	NA	101 ⁽²⁾	NA	NA	1,000 ⁽²⁾	1,000 ⁽²⁾	1,000 ⁽²⁾	1,000 ⁽²⁾	NA	1,000 ⁽²⁾	NA	1,000	5.28	NA

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal
Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal
Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

See last page for footnotes.

Table 12a - Excavation Confirmation Surface Soil - VOCs
Page 1 of 8

Table 12a
Excavation Confirmation Surface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Albion Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Depth Sampled (feet)	Lab Sample No.	Acetone	Acrolein	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane (Methyl Bromide)	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorobromomethane	Chloroethane	Chloroform	Chloromethane (Methyl Chloride)
A6 Sidewalk 1 Surface	4/25/2001	1	291426	<0.109	<0.545	<0.272	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.109	<0.0054	<0.0054	<0.0054	<0.011	<0.022	<0.011
A6 Sidewalk 1a Surface	5/22/2001	0-2	291307	<0.110	<0.280	<0.280	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.0057	<0.0057	<0.0057	<0.110	<0.0057	<0.0057	<0.0057	<0.011	<0.023	<0.011
A6 Sidewalk 2 Surface	5/1/2001	1.5	291856	<0.110	<0.570	<0.280	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.0057	<0.0057	<0.0057	<0.110	<0.0057	<0.0057	<0.0057	<0.011	<0.021	<0.011
A6 Sidewalk 3 Surface	4/25/2001	1	291432	<0.107	<0.536	<0.268	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.107	<0.0054	<0.0054	<0.0054	<0.011	<0.021	<0.011
A6 Sidewalk 3a Surface	5/22/2001	1	291503	<0.110	<0.280	<0.280	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.023	<0.011
A7 Floor 1 Surface	5/1/2001	1.5	291857	<0.110	<0.560	<0.280	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.0056	<0.0056	<0.0056	<0.110	<0.0056	<0.0056	<0.0056	<0.011	<0.022	<0.011
A7 Floor 1 Surface Dup.	5/1/2001	0-2	291861	<0.110	<0.560	<0.280	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.0056	<0.0056	<0.0056	<0.110	<0.0056	<0.0056	<0.0056	<0.011	<0.022	<0.011
A7 Sidewalk 1 Surface	5/1/2001	1.5	291858	<0.110	<0.530	<0.270	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.0053	<0.0053	<0.0053	<0.110	<0.0053	<0.0053	<0.0053	<0.011	<0.021	<0.011
A7 Sidewalk 2 Surface	5/1/2001	1.5	291859	<0.110	<0.530	<0.270	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.0053	<0.0053	<0.0053	<0.110	<0.0053	<0.0053	<0.0053	<0.011	<0.021	<0.011
A7 Sidewalk 3 Surface	5/1/2001	1.5	291863	<0.110	<0.540	<0.270	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.110	<0.0054	<0.0054	<0.0054	<0.011	<0.022	<0.011
A8 Sidewalk 1 Surface	4/10/2001	0-2	290214	<0.118	<0.296	<0.296	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.012	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.012	<0.024	<0.012
A8 Sidewalk 2 Surface	4/10/2001	0-2	290217	<0.12	<0.300	<0.300	<0.006	<0.006	<0.006	<0.006	<0.006	<0.012	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.012	<0.024	<0.012
A8 Sidewalk 3 Surface	5/1/2001	1.5	291864	<0.110	<0.550	<0.270	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.011	<0.0055	<0.0055	<0.0055	<0.110	<0.0055	<0.0055	<0.0055	<0.011	<0.022	<0.011
A8 Sidewalk 4 Surface	5/1/2001	1.5	291865	<0.110	<0.540	<0.270	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.110	<0.0054	<0.0054	<0.0054	<0.011	<0.022	<0.011
Tier II Residential Cleanup Goals Surface Soil ⁽¹⁾				1,000	NA	NA	22.07	NA	NA	10.1 ⁽²⁾	NA	NA	1,000 ⁽³⁾	1,000 ⁽²⁾	1,000 ⁽²⁾	1,000 ⁽²⁾	NA	1,000 ⁽²⁾	NA	NA	104.92	NA
Tier II Non-Residential Cleanup Goals Surface Soil ⁽¹⁾				1,000	NA	NA	16.63	NA	NA	101 ⁽²⁾	NA	NA	1,000 ⁽³⁾	1,000 ⁽²⁾	1,000 ⁽²⁾	1,000 ⁽²⁾	NA	1,000 ⁽²⁾	NA	NA	5.28	NA

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal
Detected compound exceeds the VRP Tier II Residential Cleanup Goal
Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds

mg/kg = milligrams per kilogram E = result is estimated

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Management Health Evaluation by Office of

Environmental Response, July 1996.

⁽²⁾ Source: EPA Region 3 Risk-Based Concentration Table - October 1998 Update.

⁽³⁾ Source: EPA Region 3 Risk-Based Concentration Table - October 1998 Update.

Table 12a - Excavation Confirmation Surface Soil - VOCs
Page 2 of 8

Table 12a
Excavation Confirmation Surface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #699104
KERAMIDA Project No. 2825E

Sample No.	Date Sampled	Depth Sampled (feet)	Lab Sample No.	2-Chlorotoluene	4-Chlorotoluene	2-Chloroethyl vinyl ether	1,2-Dibromo-3-Chloropropane	1,2-Dibromomethane (Methylene Bromide)	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	trans-1,4-Dichloro-2-butene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethylene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloropropane	1,3-Dichloropropane	2,2-Dichloropropane
A1 Sidewall 1 Surface	5/1/2001	1.5	291846	<0.0052	<0.0052	ND	<0.100	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.100	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052
A1 Sidewall 2 Surface	5/1/2001	1.5	291849	<0.0052	<0.0052	ND	<0.110	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.110	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057
A1 Sidewall 3 Surface	5/1/2001	1.5	291851	<0.0052	<0.0052	ND	<0.100	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.110	<0.0053	<0.0053	<0.0053	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052
A1 Sidewall 4 Surface	5/1/2001	1.5	291853	<0.0051	<0.0051	<0.0051	<0.100	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051
A1 Sidewall 5 Surface	5/4/2001	0.2	292259	<0.0051	<0.0051	<0.0051	<0.100	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	ND	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056
A2 Sidewall 1 Surface	5/9/2001	0.2	292402	<0.0057	<0.0057	ND	<0.120	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	ND	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057
A2 Sidewall 2 Surface	5/9/2001	0.2	292404	<0.0057	<0.0057	ND	<0.110	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	ND	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057
A2 Sidewall 3 Surface	5/9/2001	0.2	292406	<0.0057	<0.0057	ND	<0.110	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	ND	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057
A2 Sidewall 4 Surface	5/9/2001	0.2	292411	<0.0058	<0.0058	ND	<0.120	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	ND	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058
A2 Sidewall 5 Surface	5/10/2001	0.2	292569	<0.0059	<0.0059	<0.0059	<0.100	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059
A2 Sidewall 6 Surface	5/10/2001	0.2	292571	<0.0057	<0.0057	<0.0057	<0.100	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057
A2 Sidewall 7 Surface	5/10/2001	0.2	292573	<0.0056	<0.0056	<0.0056	<0.100	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056
A3 Sidewall 1 Surface	4/10/2001	0.2	290206	<0.0054	<0.0054	<0.0054	<0.100	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054
A3 Sidewall 2 Surface	4/10/2001	0.2	290208	<0.0054	<0.0054	<0.0054	<0.100	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054
A3 Sidewall 3 Surface	4/10/2001	0.2	290211	<0.0055	<0.0055	<0.0055	<0.100	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055
A3 Sidewall 4 Surface	4/23/2001	0.2	291216	<0.0054	<0.0054	<0.0054	<0.100	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054
A3 Sidewall 6 Surface	4/23/2001	0.2	291422	<0.0056	<0.0056	ND	<0.100	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	ND	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056
A3 Sidewall 7 Surface	4/25/2001	1	291424	<0.0055	<0.0055	ND	<0.100	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	ND	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055
A3 Sidewall 8 Surface	5/4/2001	0.2	292257	<0.0051	<0.0051	<0.0051	<0.100	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051
A3 Sidewall 9 Surface	5/4/2001	0.2	292263	<0.0056	<0.0056	<0.0056	<0.100	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056
A3 Sidewall 10 Surface	5/4/2001	0.2	292265	<0.0056	<0.0056	<0.0056	<0.100	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056
A4 Sidewall 1 Surface	5/4/2001	0.2	292247	<0.0054	<0.0054	<0.0054	<0.100	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054
A4 Sidewall 2 Surface	5/4/2001	0.2	292252	<0.0054	<0.0054	<0.0054	<0.100	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054
A5 Sidewall 1 Surface	5/4/2001	0.2	292240	<0.0056	<0.0056	<0.0056	<0.100	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056
A5 Sidewall 2 Surface	5/4/2001	0.2	292243	<0.0057	<0.0057	<0.0057	<0.100	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057
A5 Sidewall 3 Surface	5/4/2001	0.2	292245	<0.0053	<0.0053	<0.0053	<0.100	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053
Tier II Residential Cleanup Goals Surface Soil ⁽¹⁾				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,000	1,000 ⁽²⁾	1.07	1,000	1,000 ⁽²⁾	NA	NA	NA
Tier II Non-Residential Cleanup Goals Surface Soil ⁽¹⁾				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	973.47	5.27	0.15	1,000	1,000 ⁽²⁾	NA	NA	NA

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal.
Detected compound exceeds the VRP Tier II Residential Cleanup Goal.
Detected compound is below the VRP Tier II Residential Cleanup Goal.

See last page for footnotes.

Table 12a - Excavation Confirmation Surface Soil - VOCs
Page 3 of 8

Table 12a
Excavation Confirmation Surface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991604
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Depth Sampled (feet)	Lab Sample No.	2-Chlorotoluene	4-Chlorotoluene	2-Chloroethyl vinyl ether	1,2-Dibromo-3-Chloropropane	1,2-Dibromomethane	Dibromomethane (Methylene Bromide)	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	trans-1,4-Dichloro-2-butene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethylene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloropropane	1,3-Dichloropropane	2,2-Dichloropropane
A6 Sidewalk 1 Surface	4/25/2001	1	291426	<0.0054	<0.0054	ND	<0.011	<0.0056	<0.011	<0.0054	<0.0054	<0.0054	<0.054	ND	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054
A6 Sidewalk 1a Surface	5/22/2001	0.2	291507	<0.0057	<0.0057	<0.057	<0.011	<0.0056	<0.011	<0.0057	<0.0057	<0.0057	<0.057	<0.057	<0.0057	<0.0057	<0.0057	0.0091	<0.0057	<0.0057	<0.0057	<0.0057
A6 Sidewalk 2 Surface	5/1/2001	1.5	291856	<0.0057	<0.0057	ND	<0.110	<0.0057	<0.011	<0.0057	<0.0057	<0.0057	<0.057	<0.110	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057
A6 Sidewalk 3 Surface	4/25/2001	1	291432	<0.0054	<0.0054	ND	<0.011	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.054	ND	<0.0054	<0.0054	<0.0054	0.0054	<0.0057	<0.0054	<0.0054	<0.0054
A6 Sidewalk 3a Surface	5/22/2001	1	291503	<0.0057	<0.0057	<0.057	<0.011	<0.0057	<0.011	<0.0057	<0.0057	<0.0057	<0.057	<0.057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057
A7 Floor 1 Surface	5/1/2001	1.5	291857	<0.0056	<0.0056	ND	<0.110	<0.0056	<0.011	<0.0056	<0.0056	<0.0056	<0.056	<0.110	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056
A7 Floor 1 Surface Dup.	5/1/2001	0.2	291861	<0.0056	<0.0056	ND	<0.110	<0.0056	<0.011	<0.0056	<0.0056	<0.0056	<0.056	<0.110	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056
A7 Sidewalk 1 Surface	5/1/2001	1.5	291858	<0.0053	<0.0053	ND	<0.110	<0.0053	<0.011	<0.0053	<0.0053	<0.0053	<0.053	<0.110	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053
A7 Sidewalk 2 Surface	5/1/2001	1.5	291859	<0.0053	<0.0053	ND	<0.110	<0.0053	<0.011	<0.0053	<0.0053	<0.0053	<0.053	<0.110	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053
A7 Sidewalk 3 Surface	5/1/2001	1.5	291863	<0.0054	<0.0054	ND	<0.110	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.054	<0.110	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054
A8 Sidewalk 1 Surface	4/10/2001	0.2	290214	<0.0059	<0.0059	<0.059	<0.012	<0.0059	<0.012	<0.0059	<0.0059	<0.0059	<0.012	<0.059	<0.0059	<0.0059	<0.0059	0.0059	<0.0059	<0.0059	<0.0059	<0.0059
A8 Sidewalk 2 Surface	4/10/2001	0.2	290217	<0.006	<0.006	<0.060	<0.012	<0.006	<0.012	<0.006	<0.006	<0.006	<0.012	<0.060	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
A8 Sidewalk 3 Surface	5/1/2001	1.5	291864	<0.0055	<0.0055	ND	<0.110	<0.0055	<0.011	<0.0055	<0.0055	<0.0055	<0.055	<0.110	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055
A8 Sidewalk 4 Surface	5/1/2001	1.5	291865	<0.0054	<0.0054	ND	<0.110	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.054	<0.110	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054
Tier II Residential Cleanup Goals Surface Soil ⁽¹⁾				NA	NA	NA	NA	NA	NA	NA	10,000	NA	26.67	NA	1,000	7.03	1.07	1,000	1,000 ⁽²⁾	NA	NA	NA
Tier II Non-Residential Cleanup Goals Surface Soil ⁽¹⁾				NA	NA	NA	NA	NA	NA	NA	10,000	NA	2,416.67	NA	973.47	5.27	0.15	1,000	1,000 ⁽²⁾	NA	NA	NA

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds

mg/kg = milligrams per kilogram

⁽¹⁾ Indiana Department of Environmental Management

Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Health Evaluation by Office of

Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

⁽³⁾ Source: EPA Region 3 Risk-Based Concentration Table - October 1998 Update.

Table 12a - Excavation Confirmation Surface Soil - VOCs
Page 4 of 8

Table 12a
Excavation Confirmation Surface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Albion Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991084
KERANDDA Project No. 2829E

Sample No.	Date Sampled	Depth Sampled (feet)	Lab Sample No.	1,1-Dichloropropene	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethylbenzene	Ethyl methacrylate	2-Hexanone	Hexachlorobutadiene	Iodomethane	Isopropylbenzene	p-Isopropyltoluene	Methylene chloride	Methyl Ethyl Ketone	Methyl(tert) butyl ether (MTBE)	4-Methyl-2-pentanone (MIBK)	Naphthalene	n-Propylbenzene	Styrene	1,1,2-Tetrachloroethane	
A1 Sidewall 1 Surface	5/1/2001	1.5	291846	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.010	<0.0052	0.023	<0.026	<0.100	<0.010	<0.052	<0.026	<0.0052	<0.0052	<0.0052	
A1 Sidewall 2 Surface	5/1/2001	1.5	291849	0.012	<0.0052	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.0057	<0.0057	<0.028	<0.110	<0.011	<0.057	<0.028	<0.0057	<0.0057	<0.0057	
A1 Sidewall 3 Surface	5/1/2001	1.5	291851	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.010	<0.0052	<0.0052	<0.026	<0.100	<0.010	<0.052	<0.026	<0.0052	<0.0052	<0.0052	
A1 Sidewall 4 Surface	5/1/2001	1.5	291853	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.0053	<0.0053	<0.026	<0.110	<0.011	<0.053	<0.026	<0.0053	<0.0053	<0.0053	
A1 Sidewall 5 Surface	5/4/2001	0.2	292259	<0.0051	<0.0051	<0.0051	<0.0051	<0.010	<0.051	<0.0051	<0.010	<0.0051	<0.0051	<0.025	<0.051	<0.010	<0.051	<0.0051	<0.0051	<0.0051	<0.0051	
A2 Sidewall 1 Surface	5/9/2001	0.2	292402	<0.006	<0.006	<0.006	<0.006	<0.06	<0.06	<0.006	<0.012	<0.006	<0.006	<0.03	<0.12	<0.012	<0.06	<0.03	<0.006	<0.006	<0.006	
A2 Sidewall 2 Surface	5/9/2001	0.2	292404	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.0057	<0.0057	<0.028	<0.11	<0.011	<0.057	<0.028	<0.0057	<0.0057	<0.0057	
A2 Sidewall 3 Surface	5/9/2001	0.2	292406	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.0057	<0.0057	<0.029	<0.11	<0.011	<0.057	<0.029	<0.0057	<0.0057	<0.0057	
A2 Sidewall 4 Surface	5/9/2001	0.2	292411	<0.0058	<0.0058	<0.0058	<0.0058	<0.058	<0.058	<0.0058	<0.012	<0.0058	<0.0058	<0.029	<0.12	<0.012	<0.058	<0.029	<0.0058	<0.0058	<0.0058	
A2 Sidewall 5 Surface	5/10/2001	0.2	292569	<0.0059	<0.0059	<0.0059	<0.0059	<0.012	<0.059	<0.0059	<0.012	<0.0059	<0.0059	<0.029	<0.059	<0.012	<0.059	<0.029	<0.0059	<0.0059	<0.0059	
A2 Sidewall 6 Surface	5/10/2001	0.2	292571	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.0057	<0.0057	<0.028	<0.057	<0.011	<0.057	<0.028	<0.0057	<0.0057	<0.0057	
A2 Sidewall 7 Surface	5/10/2001	0.2	292573	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.056	<0.0056	<0.011	<0.0056	<0.0056	<0.028	<0.056	<0.011	<0.056	<0.028	<0.0056	<0.0056	<0.0056	
A3 Sidewall 1 Surface	4/10/2001	0.2	290206	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.054	<0.0054	<0.011	<0.0054	<0.0054	<0.027	<0.054	<0.011	<0.054	<0.027	<0.0054	<0.0054	<0.0054	
A3 Sidewall 2 Surface	4/10/2001	0.2	290208	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.054	<0.0054	<0.011	<0.0054	<0.0054	<0.027	<0.054	<0.011	<0.054	<0.027	<0.0054	<0.0054	<0.0054	
A3 Sidewall 3 Surface	4/10/2001	0.2	290211	<0.0055	<0.0055	<0.0055	<0.0055	<0.011	<0.055	<0.0055	<0.011	<0.0055	<0.0055	<0.027	<0.055	<0.011	<0.055	<0.027	<0.0055	<0.0055	<0.0055	
A3 Sidewall 4 Surface	4/23/2001	0.2	291216	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.054	<0.0054	<0.011	<0.0054	<0.0054	<0.027	<0.054	<0.011	<0.054	NA	<0.0054	<0.0054	<0.0054	
A3 Sidewall 6 Surface	4/25/2001	1	291422	<0.0056	<0.0056	<0.0056	<0.0056	<0.056	<0.056	<0.0056	<0.011	<0.0056	<0.0056	0.156	<0.111	<0.011	<0.056	NA	<0.0056	<0.0056	<0.0056	
A3 Sidewall 7 Surface	4/25/2001	1	291424	<0.0055	<0.0055	<0.0055	<0.0055	<0.055	<0.055	<0.0055	<0.011	<0.0055	<0.0055	0.186	<0.110	<0.011	<0.055	<0.0055	<0.0055	<0.0055	<0.0055	
A3 Sidewall 8 Surface	5/4/2001	0.2	292257	<0.0051	<0.0051	<0.0051	<0.0051	<0.010	<0.051	<0.0051	<0.010	<0.0051	<0.0051	0.039	<0.051	<0.010	<0.051	<0.0051	<0.0051	<0.0051	<0.0051	
A3 Sidewall 9 Surface	5/4/2001	0.2	292263	<0.018	<0.018	<0.018	<0.018	<0.046	<0.180	<0.018	<0.036	<0.018	<0.018	<0.091	<0.180	<0.036	<0.180	<0.018	<0.018	<0.018	<0.018	
A3 Sidewall 10 Surface	5/4/2001	0.2	292265	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.0056	<0.0056	<0.028	<0.056	<0.011	<0.056	<0.028	<0.0056	<0.0056	<0.0056	
A4 Sidewall 1 Surface	5/4/2001	0.2	292247	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.054	<0.0054	<0.011	<0.0054	<0.0054	<0.027	<0.054	<0.011	<0.054	<0.027	<0.0054	<0.0054	<0.0054	
A4 Sidewall 2 Surface	5/4/2001	0.2	292252	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.054	<0.0054	<0.011	<0.0054	<0.0054	<0.027	<0.054	<0.011	<0.054	<0.027	<0.0054	<0.0054	<0.0054	
A5 Sidewall 1 Surface	5/4/2001	0.2	292240	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.056	<0.0056	<0.011	<0.0056	<0.0056	<0.028	<0.056	<0.011	<0.056	<0.028	<0.0056	<0.0056	<0.0056	
A5 Sidewall 2 Surface	5/4/2001	0.2	292243	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.057	<0.0057	<0.011	<0.0057	<0.0057	<0.028	<0.057	<0.011	<0.057	<0.028	<0.0057	<0.0057	<0.0057	
A5 Sidewall 3 Surface	5/4/2001	0.2	292245	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.053	<0.0053	<0.011	<0.0053	<0.0053	<0.026	<0.053	<0.011	<0.053	<0.026	<0.0053	<0.0053	<0.0053	
Tier II Residential Cleanup Goals Surface Soil ⁽¹⁾				6.40 ⁽²⁾	NA	NA	NA	NA	NA	8.21	NA	1.000 ⁽²⁾	1.000 ⁽²⁾	85.3 ⁽²⁾	1.000	NA	1.000	10.000	1.000 ⁽²⁾	NA	24.62	3.20
Tier II Non-Residential Cleanup Goals Surface Soil ⁽¹⁾				209 ⁽²⁾	NA	NA	NA	NA	NA	1.78	NA	647 ⁽²⁾	1.000 ⁽²⁾	816 ⁽²⁾	1.000	NA	1.000	10.000	1.000 ⁽²⁾	410.000 ⁽²⁾	75.91	75.41

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal.

Detected compound exceeds the VRP Tier II Residential Cleanup Goal.

Detected compound is below the VRP Tier II Residential Cleanup Goal.

See last page for footnotes.

Table 12a - Excavation Confirmation Surface Soil - VOCs
Page 5 of 8

Table 12a
Excavation Confirmation Surface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2825E

Sample No.	Date Sampled	Depth Sampled (feet)	Lab Sample No.	1,1-Dichloropropene	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethylbenzene	Ethyl methacrylate	2-Hexanone	Hexachlorobutadiene	Iodomethane	Isopropylbenzene	p-Isopropyltoluene	Methylene chloride	Methyl Ethyl Ketone	Methyl tert butyl ether (MTBE)	4-Methyl-2-pentanone (MIBK)	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane
A6 Sidewall 1 Surface	4/7/2001	1	291426	<0.0054	<0.0054	<0.0054	<0.0054	<0.054	<0.054	<0.011	<0.011	<0.0054	<0.0054	0.163 E	<0.109	<0.011	<0.054	NA	<0.0054	<0.0054	<0.0054	<0.0054
A6 Sidewall 1a Surface	5/22/2001	0-2	291507	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.057	<0.057	<0.011	<0.0057	<0.0057	0.465	<0.057	<0.011	<0.057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057
A6 Sidewall 2 Surface	5/1/2001	1.5	291856	<0.0057	<0.0057	<0.0057	<0.0057	<0.057	<0.057	<0.057	<0.011	<0.0057	<0.0057	<0.028	<0.110	<0.011	<0.0057	<0.028	<0.0057	<0.0057	<0.0057	<0.0057
A6 Sidewall 3 Surface	4/5/2001	1	291432	<0.0054	<0.0054	<0.0054	<0.0054	<0.054	<0.054	<0.054	<0.011	<0.0054	<0.0054	0.111 E	<0.107	<0.011	<0.054	NA	<0.0054	<0.0054	<0.0054	<0.0054
A6 Sidewall 3a Surface	5/22/2001	1	291503	<0.0057	<0.0057	<0.0057	<0.0057	<0.057	<0.057	<0.057	<0.011	<0.0057	<0.0057	<0.044	<0.057	<0.011	<0.057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057
A7 Floor 1 Surface	5/1/2001	1.5	291857	<0.0056	<0.0056	<0.0056	<0.0056	<0.056	<0.056	<0.056	<0.011	<0.0056	<0.0056	<0.028	<0.110	<0.011	<0.056	<0.028	<0.0056	<0.0056	<0.0056	<0.0056
A7 Floor 1 Surface Dup.	5/1/2001	0-2	291861	<0.0056	<0.0056	<0.0056	<0.0056	<0.056	<0.056	<0.056	<0.011	<0.0056	<0.0056	<0.028	<0.110	<0.011	<0.056	<0.028	<0.0056	<0.0056	<0.0056	<0.0056
A7 Sidewall 1 Surface	5/1/2001	1.5	291858	<0.0053	<0.0053	<0.0053	<0.0053	<0.053	<0.053	<0.053	<0.011	<0.0053	<0.0053	<0.027	<0.110	<0.011	<0.053	<0.027	<0.0053	<0.0053	<0.0053	<0.0053
A7 Sidewall 2 Surface	5/1/2001	1.5	291859	<0.0053	<0.0053	<0.0053	<0.0053	<0.053	<0.053	<0.053	<0.011	<0.0053	<0.0053	<0.027	<0.110	<0.011	<0.053	<0.027	<0.0053	<0.0053	<0.0053	<0.0053
A7 Sidewall 3 Surface	5/1/2001	1.5	291863	<0.0054	<0.0054	<0.0054	<0.0054	<0.054	<0.054	<0.054	<0.011	<0.0054	<0.0054	<0.027	<0.110	<0.011	<0.054	<0.027	<0.0054	<0.0054	<0.0054	<0.0054
A8 Sidewall 1 Surface	4/10/2001	0-2	290214	<0.0059	<0.0059	<0.0059	<0.0059	<0.012	<0.059	<0.059	<0.012	<0.0059	<0.0059	0.148	<0.059	<0.012	<0.059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059
A8 Sidewall 2 Surface	4/10/2001	0-2	290217	<0.006	<0.006	<0.006	<0.006	<0.012	<0.060	<0.060	<0.012	<0.006	<0.006	<0.030	<0.060	<0.012	<0.060	<0.006	<0.006	<0.006	<0.006	<0.006
A8 Sidewall 3 Surface	5/1/2001	1.5	291864	<0.0055	<0.0055	<0.0055	<0.0055	<0.055	<0.055	<0.055	<0.011	<0.0055	<0.0055	<0.027	<0.110	<0.011	<0.055	<0.027	<0.0055	<0.0055	<0.0055	<0.0055
A8 Sidewall 4 Surface	5/1/2001	1.5	291865	<0.0054	<0.0054	<0.0054	<0.0054	<0.054	<0.054	<0.054	<0.011	<0.0054	<0.0054	<0.027	<0.110	<0.011	<0.054	<0.027	<0.0054	<0.0054	<0.0054	<0.0054
Tier II Residential Cleanup Goals Surface Soil ⁽¹⁾				6.40 ⁽²⁾	NA	NA	1,000	NA	NA	8.21	NA	1,000 ⁽²⁾	1,000 ⁽²⁾	85.3 ⁽²⁾	1,000	NA	1,000	10,000	1,000 ⁽²⁾	NA	24.62	3.20
Tier II Non-Residential Cleanup Goals Surface Soil ⁽¹⁾				209 ⁽²⁾	NA	NA	1,000	NA	NA	1.78	NA	647 ⁽²⁾	1,000 ⁽²⁾	816 ⁽²⁾	1,000	NA	1,000	10,000	1,000 ⁽²⁾	410,000 ⁽³⁾	75.91	75.41

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal
Detected compound exceeds the VRP Tier II Residential Cleanup Goal
Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds
mg/kg = milligrams per kilogram E = result is estimated NA = Not Applicable
(1) Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Health Evaluation by Office of Environmental Response, July 1996.
(2) Calculated using surrogate toxicity values and Tier II equations.
(3) Source: EPA Region 3 Risk Based Concentration Table - October 1998 Update.

Table 12a

Tier II Residential Cleanup Goals Surface Soil⁽¹⁾

Tier II Non-Residential Cleanup Goals Surface Soil¹⁰

Table 12a
Excavation Confirmation Surface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991064
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Depth Sampled (feet)	Lab Sample No.	Tetrachloroethene	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	Vinyl chloride	Xylenes, Total
A6 Sidewalk 1 Surface	4/25/2001	1	291426	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.016
A6 Sidewalk 1a Surface	5/2/2001	0-2	291507	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	6.312	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.011	<0.0057
A6 Sidewalk 2 Surface	5/12/2001	1.5	291856	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.057	<0.011	<0.017
A6 Sidewalk 3 Surface	4/25/2001	1	291432	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	9.105	<0.0054	<0.0054	<0.0054	<0.0054	<0.054	<0.011	<0.016
A6 Sidewalk 3a Surface	5/2/2001	1	291503	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.011	<0.0057
A7 Floor 1 Surface	5/12/2001	1.5	291857	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.056	<0.011	<0.017
A7 Floor 1 Surface Drip	5/12/2001	0-2	291861	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.056	<0.011	<0.017
A7 Sidewalk 1 Surface	5/12/2001	1.5	291858	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	9.079	<0.0053	<0.0053	<0.0053	<0.0053	<0.053	<0.011	<0.016
A7 Sidewalk 2 Surface	5/12/2001	1.5	291859	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.053	<0.011	<0.016
A7 Sidewalk 3 Surface	5/12/2001	1.5	291863	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.054	<0.011	<0.016
A8 Sidewalk 1 Surface	4/10/2001	0-2	290214	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	6.237	<0.0059	<0.0059	<0.0059	<0.0059	<0.012	<0.012	<0.0059
A8 Sidewalk 2 Surface	4/10/2001	0-2	290217	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	6.193	<0.006	<0.006	<0.006	<0.006	<0.012	<0.012	<0.006
A8 Sidewalk 3 Surface	5/12/2001	1.5	291864	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.055	<0.011	<0.016
A8 Sidewalk 4 Surface	5/12/2001	1.5	291865	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.054	<0.011	<0.016
Tier II Residential Cleanup Goals Surface Soil ¹⁾				12.56	1.000	NA	2.700	1.000	11.23	58.18	1.000 ²⁾	NA	1.000 ²⁾	1.000 ²⁾	NA	0.034	1.000
Tier II Non-Residential Cleanup Goals Surface Soil ¹⁾				101.23	1.000	NA	10.000	1.000	22.74	24.97	1.000 ²⁾	NA	1.000 ²⁾	4.15 ²⁾	NA	0.32	1.000

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal
Detected compound exceeds the VRP Tier II Residential Cleanup Goal
Detected compound is below the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds
mg/kg = milligrams per kilogram E = result is estimated NA = Not Applicable
¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Health Evaluation by Office of Environmental Response, July 1996.
²⁾ Calculated using surrogate toxicity values and Tier II equations.
³⁾ Source: EPA Region 3 Risk-Based Concentration Table - October 1998 Update.

Table 12b

Excavation Confirmation Surface Soil Analytical Results for PAHs (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMDA Project No. 2829E

Sample No.	Date Sampled	Depth Sampled (feet)	Lab Sample No.	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (ghi) perylene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
A1 Sidewalk 1 Surface	5/1/2001	1.5	291846	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
A1 Sidewalk 2 Surface	5/1/2001	1.5	291849	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
A1 Sidewalk 3 Surface	5/1/2001	1.5	291851	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
A1 Sidewalk 4 Surface	5/1/2001	1.5	291853	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
A1 Sidewalk 5 Surface	5/4/2001	0-2	292259	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
A2 Sidewalk 1 Surface	5/9/2001	0-2	292402	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
A2 Sidewalk 2 Surface	5/9/2001	0-2	292404	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
A2 Sidewalk 3 Surface	5/9/2001	0-2	292406	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
A2 Sidewalk 4 Surface	5/9/2001	0-2	292411	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
A2 Sidewalk 5 Surface	5/10/2001	0-2	292469	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
A2 Sidewalk 6 Surface	5/10/2001	0-2	292571	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
A2 Sidewalk 7 Surface	5/10/2001	0-2	292573	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
A3 Sidewalk 1 Surface	4/10/2001	0-2	290206	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A3 Sidewalk 2 Surface	4/10/2001	0-2	290208	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
A3 Sidewalk 3 Surface	4/10/2001	0-2	290211	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A3 Sidewalk 4 Surface	4/23/2001	0-2	291216	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
A3 Sidewalk 6 Surface	4/25/2001	1	291422	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
A3 Sidewalk 7 Surface	4/25/2001	1	291424	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A3 Sidewalk 8 Surface	5/4/2001	0-2	292257	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
A3 Sidewalk 9 Surface	5/4/2001	0-2	292263	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
A3 Sidewalk 10 Surface	5/4/2001	0-2	292265	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
A4 Sidewalk 1 Surface	5/4/2001	0-2	292247	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
A4 Sidewalk 2 Surface	5/4/2001	0-2	292252	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
A5 Sidewalk 1 Surface	5/4/2001	0-2	292240	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
A5 Sidewalk 2 Surface	5/4/2001	0-2	292243	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
A5 Sidewalk 3 Surface	5/4/2001	0-2	292245	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
A6 Sidewalk 1 Surface	4/25/2001	1	291426	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A6 Sidewalk 2 Surface	5/22/2001	0-2	293507	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
A6 Sidewalk 3 Surface	5/7/2001	1.5	291856	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
A6 Sidewalk 4 Surface	4/25/2001	1	291432	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
A6 Sidewalk 5 Surface	5/22/2001	1	293503	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
A7 Floor 1 Surface	5/7/2001	1.5	291857	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
A7 Floor 1 Surface Dup.	5/7/2001	0-2	291861	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
A7 Sidewalk 1 Surface	5/7/2001	1.5	291858	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
A7 Sidewalk 2 Surface	5/7/2001	1.5	291859	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
A7 Sidewalk 3 Surface	5/7/2001	1.5	291863	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
A8 Sidewalk 1 Surface	4/10/2001	0-2	290214	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59
A8 Sidewalk 2 Surface	4/10/2001	0-2	290217	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
A8 Sidewalk 3 Surface	5/7/2001	1.5	291864	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A8 Sidewalk 4 Surface	5/7/2001	1.5	291865	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
Tier II Residential Cleanup Goals Surface Soil ⁽¹⁾				10,000	5,470 ⁽²⁾	10,000	8.88	0.66	0.88	1,620 ⁽³⁾	8.77	87.67	0.66	2,160	10,000	0.88	10,000	260 ⁽³⁾	8,100
Tier II Non-Residential Cleanup Goals Surface Soil ⁽¹⁾				10,000	4,570 ⁽²⁾	10,000	79.45	7.94	79.45	10,000 ⁽²⁾	794.52	7,945.21	7.95	10,000	10,000	79.45	10,000	260 ⁽³⁾	10,000

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

PAHs = Polynuclear Aromatic Hydrocarbons

mg/kg = micrograms per kilogram

NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

⁽³⁾ Tier I Health Protective Levels for Phenanthrene, Indene, and Acroline Technical Memo by Indiana Voluntary Remediation Program, Dated 4/21/98.

Table 12b - Excavation Confirmation Surface Soil - PAHs

Page 1 of 1

Table 12c
Excavation Confirmation Surface Soil Analytical Results for Metals (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Depth Sampled (feet)	Lab Sample No.	Total Cadmium	Total Chromium	Total Lead
A1 Sidewall 1 Surface	5/1/2001	1.5	291846	<0.52	11	120
A1 Sidewall 2 Surface	5/1/2001	1.5	291849	2.0	14	49
A1 Sidewall 3 Surface	5/1/2001	1.5	291851	<0.52	13	200
A1 Sidewall 4 Surface	5/1/2001	1.5	291853	1.4	26	1,200
A1 Sidewall 5 Surface	5/4/2001	0-2	292259	<0.51	6	48
A2 Sidewall 1 Surface	5/9/2001	0-2	292402	<0.6	12	30
A2 Sidewall 2 Surface	5/9/2001	0-2	292404	0.9	12	100
A2 Sidewall 3 Surface	5/9/2001	0-2	292406	8.6	24	1,100
A2 Sidewall 4 Surface	5/9/2001	0-2	292411	<0.58	9.1	120
A2 Sidewall 5 Surface	5/10/2001	0-2	292569	2.1	13	81
A2 Sidewall 6 Surface	5/10/2001	0-2	292571	0.98	14	30
A2 Sidewall 7 Surface	5/10/2001	0-2	292573	1.7	16	12
A3 Sidewall 1 Surface	4/10/2001	0-2	290206	<0.54	15	24
A3 Sidewall 2 Surface	4/10/2001	0-2	290208	2.3	30	559
A3 Sidewall 3 Surface	4/10/2001	0-2	290211	2.4	20	394
A3 Sidewall 4 Surface	4/23/2001	0-2	291216	6.1	19	483
A3 Sidewall 6 Surface	4/25/2001	1	291422	2.7	17	367
A3 Sidewall 7 Surface	4/25/2001	1	291424	4.1	18	385
A3 Sidewall 8 Surface	5/4/2001	0-2	292257	14.0	25	830
A3 Sidewall 9 Surface	5/4/2001	0-2	292263	9.9	34	900
A3 Sidewall 10 Surface	5/4/2001	0-2	292265	<0.56	11	54
A4 Sidewall 1 Surface	5/4/2001	0-2	292247	4.6	18	440
A4 Sidewall 2 Surface	5/4/2001	0-2	292252	2.2	13	240
A5 Sidewall 1 Surface	5/4/2001	0-2	292240	2.7	42	470
A5 Sidewall 2 Surface	5/4/2001	0-2	292243	<0.57	14	14
A5 Sidewall 3 Surface	5/4/2001	0-2	292245	0.96	14	160
A6 Sidewall 1 Surface	4/25/2001	1	291426	12	68	3,050
A6 Sidewall 1a Surface	5/22/2001	0-2	293507	85	86	2,000
A6 Sidewall 2 Surface	5/1/2001	1.5	291856	<0.57	11	39
A6 Sidewall 3 Surface	4/25/2001	1	291432	7.4	53	1,390
A6 Sidewall 3a Surface	5/22/2001	1	293503	2.3	12	11
A7 Floor 1 Surface	5/1/2001	1.5	291857	<0.56	10	13
A7 Floor 1 Surface Dup.	5/1/2001	0-2	291861	<0.56	10	13
A7 Sidewall 1 Surface	5/1/2001	1.5	291858	<0.53	10	190
A7 Sidewall 2 Surface	5/1/2001	1.5	291859	<0.53	12	<4.3
A7 Sidewall 3 Surface	5/1/2001	1.5	291863	1.4	14	220
A8 Sidewall 1 Surface	4/10/2001	0-2	290214	13	75	2,840
A8 Sidewall 2 Surface	4/10/2001	0-2	290217	16	49	1,560
A8 Sidewall 3 Surface	5/1/2001	1.5	291864	<0.55	14	130
A8 Sidewall 4 Surface	5/1/2001	1.5	291865	2.0	26	410
Tier II Residential Cleanup Goals Surface Soil ⁽¹⁾				135	1,350	400 ⁽²⁾
Tier II Non-Residential Cleanup Goals Surface Soil ⁽¹⁾				1,020	10,000	1,000 ⁽²⁾
Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal						
Detected compound exceeds the VRP Tier II Residential Cleanup Goal						
Detected compound is below the VRP Tier II Residential Cleanup Goal						

Samples analyzed using EPA Method Series 6000/7000

mg/kg = milligrams per kilogram

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ IDEM VRP Interoffice Memo dated on January 26, 1998.

Table 13a

Tier II Residential Cleanup Goals Subsurface Soil ⁽¹⁾	22,793	NA	NA	0.059	NA	NA	0.000389 ⁽²⁾	NA	NA	33.5 ⁽²⁾	30.1 ⁽²⁾	22.0 ⁽²⁾	182 ⁽²⁾	NA	11.1 ⁽²⁾	NA	1,000	2,082	NA	NA	NA	NA
Tier II Non-Residential Cleanup Goals Subsurface Soil ⁽¹⁾	136.29	NA	NA	4.77	NA	NA	0.692 ⁽²⁾	NA	NA	972 ⁽²⁾	725 ⁽²⁾	868 ⁽²⁾	1,300 ⁽²⁾	NA	803 ⁽²⁾	NA	1,000	20.33	NA	NA	NA	NA
<p>Detected compound exceed the VRII Tier II Non-Residential Cleanup Goal</p> <p>Detected compound exceed the VRII Tier II Residential Cleanup Goal</p> <p>Detected compound is below the VRII Tier II Residential Cleanup Goal</p> <p>VOCs = Volatile Organic Compounds</p> <p>E = result is estimated</p> <p>NA = Not Applicable</p> <p>Samples analyzed using EPA SW-846 Method 8260</p> <p>mg/kg = milligrams per kilogram</p> <p>⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health</p> <p>⁽²⁾ Evaluation by Office of Environmental Response, July 1996.</p> <p>⁽³⁾ Calculated using surrogate toxicity values and Tier II equations.</p> <p>⁽⁴⁾ Source: EPA Region 3 Risk-Based Concentration Table - October 1998 Update.</p>																						

Table 13a - Excavation Confirmation Subsurface Soil - VOCs
Page 2 of 8

VOCs = Volatile Organic Compounds
 Samples analyzed using EPA SW-846 Method 8260
 n/sg = nanograms per kilogram
 (a) Indiana Department of Environmental Management
 Program Resource Guide, Appendix, F Tier II Cleanup Goals-Human Health
 Evaluation by Office of Environmental Response, July 1996.
 (b) Calculated using regression-based toxicity values and Tier II equations.
 (c) Source: EPA Region 3 Risk-based Concentration Table - Over 1998 Update.

Sample No.	Date Sampled	Depth Sampled (feet)	Lab Sample No.	1,2-Dibromomethane	Dibromomethane (Methylene Bromide)	1,2-Dichlorobenzene	1,2-Dichlorobenzene	Dichlorobenzene	trans-1,2-Dichlorobenzene	1,2-Dichloropropane	1,2-Dichloropropane	2,2-Dichloropropane	1,1-Dichloropropane	trans-1,3-Dichloropropene	Dichloropropene	Ethylbenzene	Ethyl methacrylate
A1 Floor 1	5/1/2001	8	291848	<0.0053	<0.011	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053
A1 Floor 2	5/1/2001	6	291855	<0.0051	<0.010	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051
A1 Sidewall 2 Subsurface	5/1/2001	6	291847	<0.0053	<0.011	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053
A1 Sidewall 3 Subsurface	5/1/2001	4	291850	<0.0053	<0.011	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053
A1 Sidewall 4 Subsurface	5/1/2001	6	291852	<0.0053	<0.011	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053
A1 Sidewall 5 Subsurface	5/1/2001	4	291854	<0.0053	<0.011	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053
A1 Sidewall 6 Subsurface	5/4/2001	4	292260	<0.0051	<0.010	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051
A1 Sidewall 7 Subsurface	5/9/2001	9	292408	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054
A2 Floor 1 Dup.	5/9/2001	9	292409	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054
A2 Floor 2	5/9/2001	6	292410	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054
A2 Floor 3	5/10/2001	7	292576	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054
A2 Floor 4	5/10/2001	6	292577	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054
A2 Sidewall 1 Subsurface	5/9/2001	7	292403	<0.0056	<0.011	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056
A2 Sidewall 2 Subsurface	5/9/2001	4	292405	<0.0057	<0.011	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057
A2 Sidewall 3 Subsurface	5/9/2001	4	292407	<0.0057	<0.011	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057
A2 Sidewall 4 Subsurface	5/9/2001	7	292412	<0.0057	<0.011	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057
A2 Sidewall 5 Subsurface	5/10/2001	4.5	292570	<0.0057	<0.011	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057
A2 Sidewall 6 Subsurface	5/10/2001	3	292572	<0.0058	<0.012	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058
A2 Sidewall 7 Subsurface	5/10/2001	5	292574	<0.0056	<0.011	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056
A3 Floor 1	5/10/2001	5	292575	<0.0056	<0.011	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056
A3 Floor 2	4/10/2001	6.5	290203	<0.0055	<0.011	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055
A3 Floor 3	4/10/2001	6.5	290204	<0.0055	<0.011	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055
A3 Floor 4	4/18/2001	6	290693	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054
A3 Floor 5	4/21/2001	6	290694	<0.0055	<0.011	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055
A3 Floor 6	4/21/2001	6-7	291218	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054
A3 Floor 7	4/21/2001	6	291220	<0.0055	<0.011	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055
A3 Floor 8	4/25/2001	4	291221	<0.0056	<0.011	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056
A3 Floor 8 Dup.	5/4/2001	4	292249	<0.0051	<0.010	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051
A3 Floor 9	4/25/2001	4	292250	<0.0051	<0.010	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051
A3 Floor 9	5/4/2001	4	292251	<0.0055	<0.011	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055
A3 Floor 10	5/4/2001	4.5	292256	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054
A3 Sidewall 1 Subsurface	4/10/2001	4.5	290205	<0.0059	<0.012	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059
A3 Sidewall 2 Subsurface	4/10/2001	3.5	290207	<0.0059	<0.012	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059
A3 Sidewall 3 Subsurface	4/10/2001	4	290209	<0.0057	<0.011	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057
A3 Sidewall 4 Subsurface	4/10/2001	4	290210	<0.0057	<0.011	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057
Tier II Residential Cleanup Goals Subsurface Soil ⁽¹⁾				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tier II Non-Residential Cleanup Goals Subsurface Soil ⁽¹⁾				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Exceeded compound exceeds the VRP Tier II Non-Residential Cleanup Goal				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Exceeded compound exceeds the VRP Tier II Residential Cleanup Goal				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Exceeded compound exceeds the VRP Tier II Residential Cleanup Goal				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See last page for footnotes.

Table 13a - Excavation Confirmation Subsurface Soil - VOCs
Page 3 of 8

Table 13a
Excavation Confirmation Subsurface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Depth Sampled (feet)	Lab Sample No.	1,2-Dibromochloroethane	Dibromomethane (Methylene Bromide)	1,3-Dichlorobenzene	1,4-Dichlorobenzene	1,2-Dichloroethane	1,1-Dichloroethane	1,2-Dichloropropane	trans-1,2-Dichloroethene	1,2-Dichloropropane	2,2-Dichloropropane	1,1-Dichloropropene	trans-1,3-Dichloropropene	Ethylbenzene	Ethyl methacrylate
A3 Sidewalk 4 Subsurface	4/23/2001	4	291217	<0.0053	<0.011	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011
A3 Sidewalk 2 Subsurface	4/25/2001	2.5	291423	<0.0059	<0.012	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.059
A3 Sidewalk 3 Subsurface	4/25/2001	3	291425	<0.0056	<0.011	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.056
A3 Sidewalk 8 Subsurface	5/4/2001	2.5-3	292248	<0.0052	<0.010	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.010
A3 Sidewalk 9 Subsurface	5/4/2001	3	292264	<0.0052	<0.010	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.010
A3 Sidewalk 10 Subsurface	5/4/2001	3	292266	<0.0052	<0.009	8.49	<0.0052	<0.0052	<0.0052	<0.0052	8.27	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.009
A3 Sidewalk 10 Subsurface Dup.	5/4/2001	3.5	292267	<0.0052	<0.009	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	8.11	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.009
A4 Floor 1	5/4/2001	4	292255	<0.0052	<0.010	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.010
A4 Floor 2	5/4/2001	4	292254	<0.0051	<0.010	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.010
A4 Sidewalk 1 Subsurface	5/4/2001	3	292248	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011
A4 Sidewalk 2 Subsurface	5/4/2001	3	292253	<0.0053	<0.011	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011
A5 Floor 1	5/4/2001	5	292261	<0.0055	<0.011	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	0.354	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.011
A5 Floor 2	5/4/2001	5	292262	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	0.399	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011
A5 Sidewalk 1 Subsurface	5/4/2001	4	292241	<0.0054	<0.010	4.4	<0.0054	<0.0054	<0.0054	<0.0054	0.440	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.010
A5 Sidewalk 1 Subsurface Dup.	5/4/2001	4	292242	<0.0054	<0.010	0.26	<0.0054	<0.0054	<0.0054	<0.0054	0.27	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.010
A5 Sidewalk 2 Subsurface	5/4/2001	4	292244	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	0.27	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011
A5 Sidewalk 3 Subsurface	5/4/2001	3.5	292246	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	0.27	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011
A6 Floor 1	4/25/2001	4	291428	<0.0055	<0.011	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	0.094	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.055
A6 Floor 1 Dup.	4/25/2001	4	291429	<0.0055	<0.011	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	0.094	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.055
A6 Floor 2	4/25/2001	3	291430	<0.0053	<0.011	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	0.017	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.053
A6 Sidewalk 1 Subsurface	4/25/2001	2.5	291427	<0.0055	<0.011	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.055
A6 Sidewalk 2 Subsurface	4/25/2001	3	291431	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.054
A6 Sidewalk 3 Subsurface	4/25/2001	3	291433	<0.0056	<0.011	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.056
A7 Floor 2	5/17/2001	5	291862	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	0.411	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.054
A7 Sidewalk 2 Subsurface	5/17/2001	3.5	291860	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	0.411	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.054
A8 Floor 1	4/10/2001	5	290212	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.054
A8 Floor 2	4/10/2001	5	290213	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.054
A8 Sidewalk 1 Subsurface	4/10/2001	3	290215	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.054
A8 Sidewalk 2 Subsurface	4/10/2001	3	290216	<0.0054	<0.011	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.054
Tier II Residential Cleanup Goals Subsurface Soil ⁽¹⁾				NA	NA	2,594.23	NA	0.897	NA	0.084	17.14	3.23 ⁽²⁾	NA	NA	0.00764 ⁽²⁾	NA	834.372
Tier II Non-Residential Cleanup Goals Subsurface Soil ⁽¹⁾				NA	NA	10,000	NA	34.67	NA	0.080	102.49	195 ⁽²⁾	NA	NA	1.36 ⁽²⁾	NA	1,000

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

VOCs = Volatile Organic Compounds
Samples analyzed using EPA SW-846 Method 8260
mg/kg = milligrams per kilogram
(1) Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F: Tier II Cleanup Goals-Human Health
Evaluation by Office of Environmental Response, July 1996.
(2) Calculated using surrogate toxicity values and Tier II equations.
(3) Source: EPA Region 3 Risk-Based Concentration Table - October 1998 Update.

Excavation Confirmation Subsurface Soil Analytical Results for VOCs (mg/kg)

Sample No.	Date Sampled	Depth Sampled (feet)	Lab Sample No.	2-Hexanone	Hexachloro-butadiene	Iodomethane	Isopropylbenzene	p-Isopropyl-toluene	Methylene chloride	Methyl Ethyl Ketone	Methyl(tert) butyl ether (MTBE)	Methyl-2-pentanol (MIBK)	n-Propyl-benzene	Styrene	1,1,2,2-Tetrachloro-ethane	Tetraethoxyethene	Toluene	1,2,3-Trichloro-benzene	1,2,4-Trichloro-benzene	1,1,1-Trichloroethane			
A1 Floor 1	5/1/2001	8	291848	<0.053	<0.0053	<0.011	<0.0053	<0.053	<0.027	<0.110	<0.011	<0.053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053			
A1 Floor 2	5/1/2001	6	291855	<0.051	<0.002	<0.010	<0.0051	<0.092	<0.026	<0.100	<0.010	<0.051	<0.002	<0.0051	<0.002	0.011	<0.0051	<0.002	<0.0051	<0.0053			
A1 Sidewall 1 Subsurface	5/1/2001	6	291850	<0.053	<0.0053	<0.011	<0.0053	<0.053	<0.028	<0.110	<0.011	<0.056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056			
A1 Sidewall 2 Subsurface	5/1/2001	4	291850	<0.056	<0.0056	<0.011	<0.0056	<0.056	<0.028	<0.110	<0.011	<0.056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056			
A1 Sidewall 3 Subsurface	5/1/2001	4	291852	<0.054	<0.0054	<0.011	<0.0054	<0.054	<0.027	<0.110	<0.011	<0.054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054			
A1 Sidewall 4 Subsurface	5/1/2001	6	291854	<0.053	<0.0053	<0.011	<0.0053	<0.053	<0.027	<0.110	<0.011	<0.053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053			
A1 Sidewall 5 Subsurface	5/4/2001	4	291854	<0.051	<0.0051	<0.010	<0.0051	<0.051	<0.026	<0.110	<0.010	<0.051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051			
A2 Floor 1	5/9/2001	9	292240	<0.054	<0.0054	<0.011	0.53	<0.051	<0.027	<0.11	<0.011	<0.054	5.7	<0.0054	<0.0054	0.7	0.17	<0.0054	<0.0054	<0.0054			
A2 Floor 1 Dup.	5/9/2001	9	292408	<0.054	<0.0054	<0.011	<0.054	<0.054	<0.027	<0.11	<0.011	<0.054	<0.054	<0.0054	<0.0054	0.7	0.17	<0.0054	<0.0054	<0.0054			
A2 Floor 2	5/9/2001	6	292408	<0.054	<0.0054	<0.011	<0.054	<0.054	<0.028	<0.11	<0.011	<0.054	<0.054	<0.0054	<0.0054	0.7	0.17	<0.0054	<0.0054	<0.0054			
A2 Floor 2 Dup.	5/9/2001	6	292408	<0.054	<0.0054	<0.011	<0.054	<0.054	<0.028	<0.11	<0.011	<0.054	<0.054	<0.0054	<0.0054	0.7	0.17	<0.0054	<0.0054	<0.0054			
A2 Floor 3	5/10/2001	7	292576	<0.056	<0.0056	<0.011	<0.0056	<0.056	<0.028	<0.110	<0.011	<0.056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056			
A2 Floor 4	5/10/2001	6	292576	<0.054	<0.0054	<0.011	<0.0054	<0.054	<0.027	<0.110	<0.011	<0.054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054			
A2 Sidewall 1 Subsurface	5/9/2001	7	292407	<0.056	<0.0056	<0.011	<0.0056	<0.056	<0.028	<0.110	<0.011	<0.056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056			
A2 Sidewall 2 Subsurface	5/9/2001	4	292407	<0.057	<0.0057	<0.011	<0.0057	<0.057	<0.029	<0.11	<0.011	<0.057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057			
A2 Sidewall 3 Subsurface	5/9/2001	4	292407	<0.057	<0.0057	<0.011	<0.0057	<0.057	<0.029	<0.11	<0.011	<0.057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057			
A2 Sidewall 4 Subsurface	5/9/2001	7	292412	<0.12	<0.12	<0.24	<0.12	<0.12	<0.62	<2.4	<0.24	<0.62	<0.12	<0.12	<0.12	1.2	<0.12	<0.12	<0.12	<0.12			
A2 Sidewall 5 Subsurface	5/10/2001	4.5	292570	<0.057	<0.0057	<0.011	<0.0057	<0.057	<0.029	<0.057	<0.011	<0.057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057			
A2 Sidewall 6 Subsurface	5/10/2001	3	292572	<0.058	<0.0058	<0.012	<0.0058	<0.058	<0.029	<0.058	<0.012	<0.058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058			
A2 Sidewall 7 Subsurface	5/10/2001	5	292574	<0.056	<0.0056	<0.011	<0.0056	<0.056	<0.028	<0.056	<0.011	<0.056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056			
A2 Sidewall 7 Subsurface Dup.	5/10/2001	5	292574	<0.056	<0.0056	<0.011	<0.0056	<0.056	<0.028	<0.056	<0.011	<0.056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056			
A3 Floor 1	4/10/2001	5	292023	<0.055	<0.0055	<0.011	<0.0055	<0.055	<0.027	<0.055	<0.011	<0.055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055			
A3 Floor 2	4/10/2001	6.5	292023	<0.055	<0.0055	<0.011	<0.0055	<0.055	<0.027	<0.055	<0.011	<0.055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055			
A3 Floor 3	4/10/2001	6.5	290204	<0.055	<0.0055	<0.011	<0.0055	<0.055	<0.028	<0.055	<0.011	<0.055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055			
A3 Floor 4	4/18/2001	6	290603	<0.054	<0.0054	<0.011	<0.0054	<0.054	<0.027	<0.054	<0.011	<0.054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054			
A3 Floor 5	4/18/2001	6	290603	<0.055	<0.0055	<0.011	<0.0055	<0.055	<0.028	<0.055	<0.011	<0.055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055			
A3 Floor 6	4/23/2001	6.7	290604	<0.054	<0.0054	<0.011	<0.0054	<0.054	<0.027	<0.054	<0.011	<0.054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054			
A3 Floor 5 Dup.	4/23/2001	6.7	291218	<0.054	<0.0054	<0.011	<0.0054	<0.054	<0.027	<0.054	<0.011	<0.054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054			
A3 Floor 6 Dup.	4/23/2001	6	291219	<0.055	<0.0055	<0.011	<0.0055	<0.055	<0.028	<0.055	<0.011	<0.055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055			
A3 Floor 7	4/23/2001	6	291220	<0.055	<0.0055	<0.011	<0.0055	<0.055	<0.028	<0.055	<0.011	<0.055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055			
A3 Floor 8	4/23/2001	4	291221	<0.056	<0.0056	<0.011	<0.0056	<0.056	<0.028	<0.056	<0.011	<0.056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056			
A3 Floor 8 Dup.	4/23/2001	4	291221	<0.056	<0.0056	<0.011	<0.0056	<0.056	<0.028	<0.056	<0.011	<0.056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056			
A3 Floor 9	5/4/2001	4	292249	<0.051	<0.0051	<0.010	<0.0051	<0.051	<0.026	<0.051	<0.010	<0.051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051			
A3 Floor 8 Dup.	5/4/2001	4	292250	<0.051	<0.0051	<0.010	<0.0051	<0.051	<0.026	<0.051	<0.010	<0.051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051			
A3 Floor 9 Dup.	4/25/2001	4	292250	<0.055	<0.0055	<0.011	<0.0055	<0.055	<0.028	<0.110	<0.011	<0.055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055			
A3 Floor 9	5/4/2001	4	292251	<0.054	<0.0054	<0.011	<0.0054	<0.054	<0.027	<0.110	<0.011	<0.054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054			
A3 Floor 9 Dup.	5/4/2001	4	292251	<0.054	<0.0054	<0.011	<0.0054	<0.054	<0.027	<0.110	<0.011	<0.054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054			
A3 Floor 10	5/4/2001	4.5	292256	<0.054	<0.0054	<0.011	<0.0054	<0.054	<0.027	<0.054	<0.011	<0.054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054			
A3 Sidewall 1 Subsurface	4/10/2001	4.5	290205	<0.059	<0.0059	<0.012	<0.0059	<0.059	<0.030	<0.059	<0.012	<0.059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059			
A3 Sidewall 2 Subsurface	4/10/2001	3.5	290207	<0.059	<0.0059	<0.012	<0.0059	<0.059	<0.029	<0.059	<0.012	<0.059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059			
A3 Sidewall 3 Subsurface	4/10/2001	4	290209	<0.057	<0.0057	<0.011	<0.0057	<0.057	<0.029	<0.057	<0.011	<0.057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057			
A3 Sidewall 3 Subsurface Dup.	4/10/2001	4	290210	<0.057	<0.0057	<0.011	<0.0057	<0.057	8.433	<0.057	<0.011	<0.057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057			
Tier II Residential Cleanup Coals Subsurface Soil ⁽¹⁾				NA	6.777	NA	185 ⁽²⁾	441 ⁽²⁾	0.025 ⁽²⁾	11.62	NA	68.147	1,767,785	33.5 ⁽²⁾	NA	0.076	0.044	0.227	278.936	NA	235.033	229.642	0.035
H.W. Residential Cleanup Coals Subsurface Soil ⁽¹⁾				NA	31.18	NA	188 ⁽²⁾	1,000 ⁽²⁾	10.0 ⁽²⁾	146.24	NA	407.48	10,000	972 ⁽²⁾	410,000 ⁽²⁾	7.24	0.21	8.0	8.0	NA	1,405.37	1,000	1.05

Title II Non-Discriminatory Classroom Coals Subsection 5a(1)

Did it Non-Residential Cleanup Goats Surface you
Detected compound exceeds the VPD that if Non-Residential Cleanup Goat

Detected compound exceeds the VRP Tier II Residential Clean Air

See last page for footnotes.

Table 13a - Excavation Confirmation Subsurface Soil - VOCs

Table 13a
Excavation Confirmation Subsurface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991034
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Depth Sampled (feet)	Lab Sample No.	2-Hexanone	Hexachloro-butadiene	Iodomethane	Isopropylbenzene	p-Isopropyl-toluene	Methylene chloride	Methyl Ethyl Ketone	Methyl tert-butyl ether (MTBE)	1-Methyl-2-pentene (MIBK)	Naphthalene	n-Propyl-benzene	Styrene	1,1,1,2-Tetrachloro-ethane	Tetrachloroethene	Toluene	1,2,3-Trichloro-benzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane
A3 Sidewalk 4 Subsurface	4/23/2001	4	291217	<0.053	<0.0053	<0.011	<0.0053	<0.0053	<0.027	<0.053	<0.011	<0.053	NA	<0.053	<0.053	<0.0053	<0.0053	<0.021	<0.0053	<0.0053	<0.0053
A3 Sidewalk 6 Subsurface	4/25/2001	2.5	291423	<0.059	<0.0059	<0.012	<0.0059	<0.0059	0.302 E	<0.119	<0.012	<0.059	NA	<0.059	<0.059	<0.0059	<0.0059	<0.059	<0.0059	<0.0059	<0.0059
A3 Sidewalk 7 Subsurface	4/25/2001	3	291425	<0.056	<0.0056	<0.011	<0.0056	<0.0056	0.349 F	<0.111	<0.011	<0.056	NA	<0.056	<0.056	<0.0056	<0.0056	<0.056	<0.0056	<0.0056	<0.0056
A3 Sidewalk 8 Subsurface	5/4/2001	2.5-3	292258	<0.052	<0.0052	<0.010	<0.0052	<0.0052	<0.026	<0.052	<0.010	<0.052	<0.052	<0.052	<0.052	<0.0052	<0.0052	<0.052	<0.0052	<0.0052	<0.0052
A3 Sidewalk 9 Subsurface	5/4/2001	3	292264	<0.052	<0.0052	<0.010	<0.0052	<0.0052	<0.026	<0.052	<0.010	<0.052	<0.052	<0.052	<0.052	<0.0052	<0.0052	<0.052	<0.0052	<0.0052	<0.0052
A3 Sidewalk 10 Subsurface	5/4/2001	3.5	292266	<0.250	<0.025	<0.049	<0.025	<0.025	<0.120	<0.250	<0.049	<0.250	<0.025	<0.025	<0.025	<0.025	0.843	<0.025	<0.025	<0.025	<0.025
A3 Sidewalk 10 Subsurface Dup.	5/4/2001	3.5	292267	<0.250	<0.025	<0.049	<0.025	<0.025	<0.130	<0.250	<0.049	<0.250	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
A4 Floor 1	5/4/2001	4	292255	<0.052	<0.0052	<0.010	<0.0052	<0.0052	0.833 E	<0.052	<0.010	<0.052	<0.052	<0.052	<0.052	<0.0052	<0.0052	<0.052	<0.0052	<0.0052	<0.0052
A4 Floor 2	5/4/2001	4	292254	<0.051	<0.0051	<0.010	<0.0051	<0.0051	0.833 E	<0.051	<0.010	<0.051	<0.051	<0.051	<0.051	<0.0051	<0.0051	<0.051	<0.0051	<0.0051	<0.0051
A4 Sidewalk 1 Subsurface	5/4/2001	3	292248	<0.054	<0.0054	<0.011	<0.0054	<0.0054	<0.027	<0.054	<0.011	<0.054	<0.054	<0.054	<0.054	<0.0054	<0.0054	<0.054	<0.0054	<0.0054	<0.0054
A4 Sidewalk 2 Subsurface	5/4/2001	3	292253	<0.053	<0.0053	<0.011	<0.0053	<0.0053	<0.026	<0.053	<0.011	<0.053	<0.053	<0.053	<0.053	<0.0053	<0.0053	<0.053	<0.0053	<0.0053	<0.0053
A5 Floor 1	5/4/2001	5	292261	<0.055	<0.0055	<0.011	<0.0055	<0.0055	<0.027	<0.055	<0.011	<0.055	0.82	0.024	<0.055	<0.0055	<0.0055	<0.055	<0.0055	<0.0055	<0.0055
A5 Floor 2	5/4/2001	5	292262	<0.054	<0.0054	<0.011	<0.0054	<0.0054	<0.027	<0.054	<0.011	<0.054	<0.054	<0.054	<0.054	<0.0054	<0.0054	<0.054	<0.0054	<0.0054	<0.0054
A5 Sidewalk 1 Subsurface	5/4/2001	4	292241	<2.0	<0.200	<0.410	<0.200	<0.200	<1.0	<2.0	<0.410	<2.0	0.44	0.38	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200
A5 Sidewalk 1 Subsurface Dup.	5/4/2001	4	292242	<2.0	<0.200	<0.400	<0.200	<0.200	<1.0	<2.0	<0.400	<2.0	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200
A5 Sidewalk 2 Subsurface	5/4/2001	4	292244	<0.054	<0.0054	<0.011	<0.0054	<0.0054	<0.027	<0.054	<0.011	<0.054	<0.054	<0.054	<0.054	<0.0054	<0.0054	<0.054	<0.0054	<0.0054	<0.0054
A5 Sidewalk 3 Subsurface	5/4/2001	3.5	292246	<0.054	<0.0054	<0.011	<0.0054	<0.0054	<0.027	<0.054	<0.011	<0.054	<0.054	<0.054	<0.054	<0.0054	<0.0054	<0.054	<0.0054	<0.0054	<0.0054
A6 Floor 1	4/25/2001	4	291428	<0.055	<0.0055	<0.011	<0.0055	<0.0055	0.122 F	<0.110	<0.011	<0.055	NA	<0.055	<0.055	<0.0055	<0.0055	<0.055	<0.0055	<0.0055	<0.0055
A6 Floor 1 Dup	4/25/2001	4	291429	<0.055	<0.0055	<0.011	<0.0055	<0.0055	0.160 F	<0.109	<0.011	<0.055	NA	<0.055	<0.055	<0.0055	<0.0055	<0.055	<0.0055	<0.0055	<0.0055
A6 Floor 2	4/25/2001	3	291430	<0.053	<0.0053	<0.011	<0.0053	<0.0053	0.166 F	<0.106	<0.011	<0.053	NA	<0.053	<0.053	<0.0053	<0.0053	<0.053	<0.0053	<0.0053	<0.0053
A6 Sidewalk 1 Subsurface	4/25/2001	2.5	291427	<0.055	<0.0055	<0.011	<0.0055	<0.0055	0.096 F	<0.111	<0.011	<0.055	<0.055	<0.055	<0.055	<0.0055	<0.0055	<0.055	<0.0055	<0.0055	<0.0055
A6 Sidewalk 2 Subsurface	4/25/2001	3	291431	<0.054	<0.0054	<0.011	<0.0054	<0.0054	0.162 F	<0.108	<0.011	<0.054	NA	<0.054	<0.054	<0.0054	<0.0054	<0.054	<0.0054	<0.0054	<0.0054
A6 Sidewalk 3 Subsurface	4/25/2001	3	291433	<0.056	<0.0056	<0.011	<0.0056	<0.0056	0.449 F	<0.11	<0.011	<0.056	NA	<0.056	<0.056	<0.0056	<0.0056	<0.056	<0.0056	<0.0056	<0.0056
A7 Floor 2	5/1/2001	5	291862	<0.054	<0.0054	<0.011	<0.0054	<0.0054	<0.027	<0.110	<0.011	<0.054	<0.540	<0.110	<0.054	<0.0054	<0.0054	<0.110	<0.0054	<0.0054	<0.0054
A7 Sidewalk 2 Subsurface	5/1/2001	3.5	291860	<0.054	<0.0054	<0.011	<0.0054	<0.0054	<0.027	<0.110	<0.011	<0.054	<0.027	<0.054	<0.054	<0.0054	<0.0054	<0.054	<0.0054	<0.0054	<0.0054
A8 Floor 1	4/10/2001	5	290212	<2.23	<0.223	<0.435	<0.223	<0.223	<1.090	<2.23	<0.435	<2.23	<0.223	<0.223	<0.223	<0.223	<0.223	<0.223	<0.223	<0.223	<0.223
A8 Floor 2	4/10/2001	5	290213	<2.2	<0.220	<0.440	<0.220	<0.220	<1.1	<2.2	<0.440	<2.2	<0.220	<0.220	<0.220	<0.220	<0.220	<0.220	<0.220	<0.220	<0.220
A8 Sidewalk 1 Subsurface	4/10/2001	3	290213	<4.39	<0.439	<0.878	<0.439	<0.439	<2.2	<4.39	<0.878	<2.2	<4.39	<0.439	<0.439	<0.439	<0.439	<0.439	<0.439	<0.439	<0.439
A8 Sidewalk 2 Subsurface	4/10/2001	3	290216	<2.28	<0.228	<0.443	<0.228	<0.228	<1.13	<2.28	<0.443	<2.28	0.278	0.218	<0.228	<0.228	<0.228	<0.228	<0.228	<0.228	<0.228

Table 13a - Excavation Confirmation Subsurface Soil - VOCs
Page 6 of 8

Decreased compound exceeds the VRP Tier II Non-Residential Cleanup Goal
Increased compound exceeds the VRP Tier II Non-Residential Cleanup Goal
VRP compound is below the VRP Tier II Non-Residential Cleanup Goal
VOCs = Volatile Organic Compounds
mg/kg = milligrams per kilogram
NA = Not Applicable
Indian Department of Environmental Management Voluntary Remediation
Program Resource Guide, Appendix F Tier II Cleanup Goals/Human Health
Evaluation by Office of Environmental Response, July 1996.
⁽¹⁾ Calculated using surrogate toxicity values and Tier II equations.
⁽²⁾ Source: EPA Region 3 Risk-Based Concentration Table - October 1998 Update.

Table 13a
Excavation Confirmation Subsurface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Albion Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991044
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Depth Sampled (feet)	Lab Sample No.	Trichloroethene	Trichloro-fluoro-methane	1,2,3-Trichloro-propane	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	Vinyl acetate	Vinyl chloride	Xylenes, Total
A1 Floor 1	5/1/2001	8	291848	0.0024	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.010	<0.016
A1 Floor 2	5/1/2001	6	291855	1.4	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.010	<0.015
A1 Sidewall 1 Subsurface	5/1/2001	6	291847	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.016
A1 Sidewall 2 Subsurface	5/1/2001	4	291850	0.14	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.017
A1 Sidewall 3 Subsurface	5/1/2001	4	291852	0.003	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.016
A1 Sidewall 4 Subsurface	5/1/2001	4	291854	0.8	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.016
A1 Sidewall 5 Subsurface	5/4/2001	4	292260	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.010	<0.0051
A2 Floor 1	5/9/2001	9	292408	5.1	<0.0054	<0.0054	4.2	1.2	<0.0054	<0.011	1.1
A2 Floor 1 Dwp.	5/9/2001	9	292409	8.1	<0.6	<0.6	3.3	<0.6	<0.6	<1.2	<1.8
A2 Floor 2	5/9/2001	6	292410	8.1	<0.13	<0.13	<0.13	<0.13	<0.13	<0.26	<0.38
A2 Floor 3	5/10/2001	7	292576	<0.0024	<0.0024	<0.0024	<0.0024	<0.0024	<0.0024	<0.048	<0.048
A2 Floor 4	5/10/2001	7	292577	0.01	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.011	0.113
A2 Sidewall 1 Subsurface	5/9/2001	7	292403	2.3	<0.12	<0.12	1.7	0.39	<1.2	<0.24	0.3
A2 Sidewall 2 Subsurface	5/9/2001	4	292405	0.007	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.017
A2 Sidewall 3 Subsurface	5/9/2001	4	292407	0.04	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.017
A2 Sidewall 4 Subsurface	5/9/2001	7	292412	7.14	<0.12	<0.12	<0.12	<0.12	<0.12	<0.24	<0.37
A2 Sidewall 5 Subsurface	5/10/2001	4.5	292570	0.314	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.011	<0.0057
A2 Sidewall 6 Subsurface	5/10/2001	3	292572	0.007	<0.0058	<0.0058	<0.0058	<0.0058	<0.012	<0.012	<0.0058
A2 Sidewall 7 Subsurface	5/10/2001	5	292574	0.16	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.011	<0.0056
Dwp.	5/10/2001	5	292575	0.1	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.011	<0.0056
A3 Floor 1	4/10/2001	6.5	290203	0.01	<0.0055	<0.0055	<0.0055	<0.0055	<0.011	<0.011	<0.0055
A3 Floor 2	4/10/2001	6.5	290204	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.011	<0.011	<0.0055
A3 Floor 3	4/18/2001	6	290603	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.011	<0.0054
A3 Floor 4	4/18/2001	6	290604	0.1	<0.0055	<0.0055	<0.0055	<0.0055	<0.011	<0.011	<0.0055
A3 Floor 5	4/23/2001	6.7	291218	0.01	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.011	<0.0054
A3 Floor 5 Dwp.	4/23/2001	6.7	291219	0.01	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.011	<0.0054
A3 Floor 6	4/23/2001	6	291220	0.01	<0.0055	<0.0055	<0.0055	<0.0055	<0.011	<0.011	<0.0055
A3 Floor 7	4/23/2001	6	291221	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.011	<0.0056
A3 Floor 8	4/25/2001	4	291420	0.01	<0.0056	<0.0056	<0.0056	<0.0056	<0.011	<0.011	<0.0056
A3 Floor 8	5/4/2001	4	292249	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.010	<0.010	<0.0051
A3 Floor 8 Dwp.	5/4/2001	4	292250	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.010	<0.010	<0.0051
A3 Floor 9	4/25/2001	4	291421	0.01	<0.0055	<0.0055	0.014	<0.0055	<0.0055	<0.011	<0.017
A3 Floor 9	5/4/2001	4	292251	0.01	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.011	<0.0054
A3 Floor 10	5/4/2001	4.5	292256	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.011	<0.0054
A3 Sidewall 1 Subsurface	4/10/2001	4.5	290205	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.012	<0.012	<0.0059
A3 Sidewall 2 Subsurface	4/10/2001	3.5	290207	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.012	<0.012	1.05
A3 Sidewall 3 Subsurface	4/10/2001	4	290209	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.011	<0.0057
Dwp.	4/10/2001	4	290210	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.011	<0.011	<0.0057
Tier II Residential Cleanup Goals Subsurface Soil ⁽¹⁾											
				0.076	28.1 ⁽²⁾	NA	1.59 ⁽²⁾	1.74 ⁽²⁾	NA	0.129	1.000
Tier II Non-Residential Cleanup Goals Subsurface Soil ⁽¹⁾											
				25.73	1,000 ⁽²⁾	NA	306 ⁽²⁾	124 ⁽²⁾	NA	0.13	1,000

See last page for footnotes.

Table 13a
Excavation Confirmation Subsurface Soil Analytical Results for VOCs (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2825E

Sample No.	Date Sampled	Depth Sampled (feet)	Lab Sample No.	Trichloroethene	Trichloro-fluoro-methane	1,2,3-Trichloro-propane	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	Vinyl acetate	Vinyl chloride	Xylenes, Total
A3 Sidewall 4 Subsurface	4/23/2001	4	291217	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.011	<0.0053
A3 Sidewall 6 Subsurface	4/25/2001	2.5	291423	6.14	<0.0059	<0.0059	<0.0059	<0.0059	<0.059	<0.012	<0.018
A3 Sidewall 7 Subsurface	4/25/2001	3	291425	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.056	<0.011	<0.017
A3 Sidewall 8 Subsurface	5/4/2001	2.5-3	292158	0.0054	<0.0052	<0.0052	<0.0052	<0.0052	<0.010	<0.010	<0.0052
A3 Sidewall 9 Subsurface	5/4/2001	3	292264	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.010	<0.010	<0.0052
A3 Sidewall 10 Subsurface	5/4/2001	3.5	292266	8.2	<0.0025	<0.0025	<0.0025	<0.0025	<0.049	<0.049	<0.025
A3 Sidewall 10 Subsurface Dup.	5/4/2001	3.5	292267	3.2	<0.0025	<0.0025	<0.0025	<0.0025	<0.049	<0.049	<0.025
A4 Floor 1	5/4/2001	4	292255	0.0081	<0.0052	<0.0052	<0.0052	<0.0052	<0.010	<0.010	<0.0052
A4 Floor 2	5/4/2001	4	292254	0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.010	<0.010	<0.0051
A4 Sidewall 1 Subsurface	5/4/2001	3	292248	0.0051	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.011	<0.0054
A4 Sidewall 2 Subsurface	5/4/2001	3	292253	0.0094	<0.0053	<0.0053	<0.0053	<0.0053	<0.011	<0.011	<0.0053
A5 Floor 1	5/4/2001	5	292261	0.13	<0.0055	<0.0055	0.109	<0.0055	<0.011	<0.011	<0.0055
A5 Floor 2	5/4/2001	5	292262	0.021	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.011	<0.0054
A5 Sidewall 1 Subsurface	5/4/2001	4	292241	3.1	<0.0020	<0.0020	<0.0020	<0.0020	<0.410	<0.410	<0.200
A5 Sidewall 1 Subsurface Dup.	5/4/2001	4	292242	5.2	<0.0020	<0.0020	<0.0020	<0.0020	<0.409	<0.409	<0.200
A5 Sidewall 2 Subsurface	5/4/2001	4	292244	1.14	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.011	<0.0054
A5 Sidewall 3 Subsurface	5/4/2001	3.5	292246	1.14	<0.0054	<0.0054	<0.0054	<0.0054	<0.011	<0.011	<0.0054
A6 Floor 1	4/25/2001	4	291428	<0.0055	<0.0056	<0.0056	<0.0056	<0.0056	<0.055	<0.011	<0.017
A6 Floor 1 Dup	4/25/2001	4	291429	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.055	<0.011	<0.016
A6 Floor 2	4/25/2001	3	291430	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.053	<0.011	<0.016
A6 Sidewall 1 Subsurface	4/25/2001	2.5	291427	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.055	<0.011	<0.017
A6 Sidewall 2 Subsurface	4/25/2001	3	291431	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.054	<0.011	<0.016
A6 Sidewall 3 Subsurface	4/25/2001	3	291433	0.0048	<0.0056	<0.0056	<0.0056	<0.0056	<0.056	<0.011	<0.017
A7 Floor 2	5/1/2001	5	291862	3.6	<0.0054	<0.110	<0.110	<0.110	<0.054	<0.011	<0.016
A7 Sidewall 2 Subsurface	5/1/2001	3.5	291860	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.054	<0.011	<0.016
A8 Floor 1	4/10/2001	5	290212	10.4	<0.223	<0.223	<0.223	<0.223	<0.435	<0.435	<0.223
A8 Floor 2	4/10/2001	5	290215	4.54	<0.220	<0.220	<0.220	<0.220	<0.440	<0.440	<0.220
A8 Sidewall 1 Subsurface	4/10/2001	3	290213	1.3	<0.439	<0.439	<0.439	<0.439	<0.878	<0.878	<0.220
A8 Sidewall 2 Subsurface	4/10/2001	3	290216	<0.228	<0.228	<0.228	4.43	1.36	<0.443	<0.443	<0.24
Tier II Residential Cleanup Goals Subsurface Soil ⁽¹⁾				0.076	281 ⁽²⁾	NA	1.59 ⁽²⁾	1.74 ⁽²⁾	NA	0.129	1.000
Tier II Non-Residential Cleanup Goals Subsurface Soil ⁽¹⁾				25.73	1,000 ⁽²⁾	NA	306 ⁽²⁾	124 ⁽²⁾	NA	0.13	1,000

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal
Detected compound exceeds the VRP Tier II Residential Cleanup Goal

VOCs = Volatile Organic Compounds
E = result is estimated

Samples analyzed using EPA SW-846 Method 8260

mg/kg = milligrams per kilogram

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation

Program Resource Guide, Appendix F: Tier II Cleanup Goals-Human Health

Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

⁽³⁾ Source: EPA Region 3 Risk-Based Concentration Table - October 1998 Update.

Table 13b
Excavation Confirmation Subsurface Soil Analytical Results for PAHs (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Depth Sampled (feet)	Lab Sample No.	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Fluoranthene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
A1 Floor 1	5/1/2001	8	291848	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
A1 Floor 2	5/1/2001	6	291855	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
A1 Sidewall 2 Subsurface	5/1/2001	6	291847	<0.35	<0.35	<0.35	<0.35	0.42	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
A1 Sidewall 3 Subsurface	5/1/2001	6	291852	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A1 Sidewall 4 Subsurface	5/1/2001	4	291854	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
A1 Sidewall 5 Subsurface	5/4/2001	4	292260	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
A2 Floor 1	5/9/2001	9	292408	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	0.51	<0.36	<0.36
A2 Floor 1 Dup.	5/9/2001	9	292409	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	0.37	<0.36	<0.36
A2 Floor 2	5/9/2001	6	292410	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A2 Floor 3	5/10/2001	7	292576	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	0.54	<0.36	<0.36
A2 Floor 4	5/10/2001	6	292577	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A2 Sidewall 1 Subsurface	5/9/2001	7	292405	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
A2 Sidewall 2 Subsurface	5/9/2001	4	292406	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
A2 Sidewall 3 Subsurface	5/9/2001	4	292407	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
A2 Sidewall 4 Subsurface	5/9/2001	7	292412	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
A2 Sidewall 5 Subsurface	5/10/2001	4.5	292570	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
A2 Sidewall 6 Subsurface	5/10/2001	3	292572	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
A2 Sidewall 7 Subsurface	5/10/2001	5	292574	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
A2 Sidewall 7 Subsurface Dup.	5/10/2001	5	292575	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
A3 Floor 1	4/10/2001	6.5	290203	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A3 Floor 2	4/10/2001	6.5	290204	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A3 Floor 3	4/18/2001	6	290693	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A3 Floor 4	4/18/2001	6	290694	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A3 Floor 5	4/24/2001	6-7	291218	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A3 Floor 5 Dup.	4/23/2001	6-7	291219	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A3 Floor 6	4/23/2001	6	291220	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
A3 Floor 7	4/23/2001	6	291221	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
A3 Floor 8	4/25/2001	4	291420	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
A3 Floor 8	5/4/2001	4	292249	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
A3 Floor 8 Dup.	5/4/2001	4	292250	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
A3 Floor 9	4/25/2001	4	291421	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A3 Floor 9	5/4/2001	4	292251	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A3 Floor 10	5/4/2001	4.5	292256	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A3 Sidewall 1 Subsurface	4/10/2001	4.5	290205	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
A3 Sidewall 2 Subsurface	4/10/2001	3.5	290207	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
A3 Sidewall 3 Subsurface	4/10/2001	4	290209	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
A3 Sidewall 3 Subsurface Dup.	4/10/2001	4	290210	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
A3 Sidewall 4 Subsurface	4/23/2001	4	291217	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
Tier II Residential Cleanup Goals Subsurface Soil ⁽¹⁾				10,000	0.425 ⁽²⁾	10,000	103.881	69.849	354.977	6,330 ⁽²⁾	501.638	379.273	69.863	2,305.040	8,838.641	629.166	1,761.785	260 ⁽³⁾
Tier II Non-Residential Cleanup Goals Subsurface Soil ⁽¹⁾				10,000	1.280 ⁽²⁾	10,000	103.88	69.85	354.98	8,760 ⁽²⁾	3,759.12	10,000	69.86	10,000	10,000	629.17	10,000	260 ⁽³⁾

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal
Detected compound exceeds the VRP Tier II Residential Cleanup Goal
Detected compound is below the VRP Tier II Residential Cleanup Goal
See last page for footnotes.

Table 13b - Excavation Confirmation Subsurface Soil - PAHs
Page 1 of 2

Table 13b
Excavation Confirmation Subsurface Soil Analytical Results for PAHs (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Depth Sampled (feet)	Lab Sample No.	Acenaphthene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (ghi) perylene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Fluoranthene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
A3 Sidewall 5 Subsurface	4/25/2001	2.5	291423	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
A3 Sidewall 7 Subsurface	4/25/2001	3	291425	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
A3 Sidewall 8 Subsurface	5/4/2001	2.5-3	292258	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
A3 Sidewall 9 Subsurface	5/4/2001	3	292264	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
A3 Sidewall 10 Subsurface	5/4/2001	3.5	292266	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
A3 Sidewall 10 Subsurface Dup.	5/4/2001	3.5	292267	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
A4 Floor 1	5/4/2001	4	292255	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
A4 Floor 2	5/4/2001	4	292254	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
A4 Sidewall 1 Subsurface	5/4/2001	3	292248	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A4 Sidewall 2 Subsurface	5/4/2001	3	292253	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
A5 Floor 1	5/4/2001	5	292261	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A5 Floor 2	5/4/2001	5	292262	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A5 Sidewall 1 Subsurface	5/4/2001	4	292241	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
A5 Sidewall 1 Subsurface Dup.	5/4/2001	4	292242	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A5 Sidewall 2 Subsurface	5/4/2001	4	292244	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A5 Sidewall 3 Subsurface	5/4/2001	3.5	292246	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
A6 Floor 1	4/25/2001	4	291428	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A6 Floor 1 Dup	4/25/2001	4	291429	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A6 Floor 2	4/25/2001	3	291430	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
A6 Sidewall 1 Subsurface	4/25/2001	2.5	291427	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
A6 Sidewall 2 Subsurface	4/25/2001	3	291431	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A6 Sidewall 3 Subsurface	4/25/2001	3	291433	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
A7 Floor 2	5/1/2001	5	291862	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A7 Sidewall 2 Subsurface	5/1/2001	3.5	291860	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A8 Floor 1	4/10/2001	5	290212	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
A8 Floor 2	4/10/2001	5	290215	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A8 Sidewall 1 Subsurface	4/10/2001	3	290213	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
A8 Sidewall 2 Subsurface	4/10/2001	3	290216	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Tier II Residential Cleanup Goals Subsurface Soil ⁽¹⁾				10,000	0.425 ⁽²⁾	10,000	103.881	69.849	354.977	6,330 ⁽²⁾	379.273	69.863	2,305.040	8,838.641	629.166	1,761.785	260 ⁽³⁾
Tier II Non-Residential Cleanup Goals Subsurface Soil ⁽¹⁾				10,000	1.280 ⁽²⁾	10,000	103.88	69.85	354.98	8,760 ⁽²⁾	3,759.12	69.85	10,000	10,000	629.17	10,000	260 ⁽³⁾

Detected compound exceeds the VRP Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRP Tier II Residential Cleanup Goal

Detected compound is below the VRP Tier II Residential Cleanup Goal

PAHs = Polynuclear Aromatic Hydrocarbons

Samples analyzed using EPA SW-846 Method 8310

mg/kg = micrograms per kilogram

NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human

Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

⁽³⁾ Tier I Health Protective Levels for Phenanthrene, Indenoanthene and Acridene

Technical Memo by Indiana Voluntary Remediation Program, Dated 4/21/98.

Table 13b - Excavation Confirmation Subsurface Soil - PAHs
Page 2 of 2

Table 13c - Excavation Confirmation Subsurface Soil - Metals

Sample No.	Date	Sampled (feet)	Lab Sample No.	Cadmium	Chromium	Total Lead
A1 Floor 1	5/1/2001	8	291848	<0.53	29	700
A1 Floor 2	5/1/2001	6	291855	1.7	30	1,400
A1 Sidewall 1 Subsurface	5/1/2001	6	291847	1.5	15	390
A1 Sidewall 2 Subsurface	5/1/2001	4	291850	4.3	18	540
A1 Sidewall 3 Subsurface	5/1/2001	6	291852	1.1	8.4	120
A1 Sidewall 4 Subsurface	5/1/2001	4	291854	<0.53	6.5	7.7
A1 Sidewall 5 Subsurface	5/4/2001	4	292760	<0.51	2.9	<4.1
A2 Floor 1	5/9/2001	9	292408	<0.54	2.4	6.0
A2 Floor 1 Dup.	5/9/2001	9	292409	<0.55	2.3	<4.4
A2 Floor 2	5/9/2001	6	292410	<0.55	3.7	8.7
A2 Floor 3	5/10/2001	7	292576	<0.55	8.7	130
A2 Floor 4	5/10/2001	6	292577	<0.54	5.4	9.9
A2 Sidewall 1 Subsurface	5/9/2001	7	292403	<0.56	4.0	<4.4
A2 Sidewall 2 Subsurface	5/9/2001	4	292405	<0.56	9.4	13
A2 Sidewall 3 Subsurface	5/9/2001	4	292407	2.4	17	280
A2 Sidewall 4 Subsurface	5/9/2001	7	292412	<0.56	4.9	6.3
A2 Sidewall 5 Subsurface	5/10/2001	4.5	292570	<0.57	11	9.4
A2 Sidewall 6 Subsurface	5/10/2001	3	292572	<0.58	16	37
A2 Sidewall 7 Subsurface	5/10/2001	5	292574	<0.56	5.6	<4.5
A2 Sidewall 7 Subsurface Dup.	5/10/2001	5	292575	<0.56	7.2	9.8
A3 Floor 1	4/10/2001	6.5	290203	<0.55	9.2	170
A3 Floor 2	4/10/2001	6.5	290204	<0.55	6.1	90
A3 Floor 3	4/18/2001	6	290693	<0.54	5.6	25
A3 Floor 4	4/18/2001	6	290694	<0.54	20	530
A3 Floor 5	4/23/2001	6-7	291218	<0.54	7.8	6.8
A3 Floor 5 Dup.	4/23/2001	6-7	291219	<0.54	5.8	<4.3
A3 Floor 6	4/23/2001	6	291220	<0.55	12	111
A3 Floor 7	4/23/2001	6	291221	<0.56	6.8	14
A3 Floor 8	5/4/2001	4	292249	<0.51	5.1	130
A3 Floor 8 Dup.	5/4/2001	4	292250	9.6	7.7	88
A3 Floor 9	4/25/2001	4	291421	<0.55	8.3	15
A3 Floor 9	5/4/2001	4	292251	<0.54	3.9	8.3
A3 Floor 10	5/4/2001	4.5	292256	<0.54	4.8	5.4
A3 Sidewall 1 Subsurface	4/10/2001	4.5	290205	<0.59	20	59
A3 Sidewall 2 Subsurface	4/10/2001	3.5	290207	<0.57	18	50
A3 Sidewall 3 Subsurface	4/10/2001	4	290209	<0.57	16	2.7
A3 Sidewall 3 Subsurface Dup.	4/10/2001	4	290210	<0.57	17	5.5
A3 Sidewall 4 Subsurface	4/23/2001	4	291217	<0.53	6.5	<4.2
A3 Sidewall 6 Subsurface	4/25/2001	2.5	291423	<0.59	9.1	26
A3 Sidewall 7 Subsurface	4/25/2001	3	291425	<0.56	12	5.1
A3 Sidewall 8 Subsurface	5/4/2001	2.5-3	292258	18	30	990
A3 Sidewall 9 Subsurface	5/4/2001	3	292264	<5.2	12	<4.2
A3 Sidewall 10 Subsurface	5/4/2001	3.5	292266	<0.54	5.1	<4.3
A3 Sidewall 10 Subsurface Dup.	5/4/2001	3.5	292267	<0.54	4.6	4.3
A4 Floor 1	5/4/2001	4	292255	3.6	12	410
A4 Floor 2	5/4/2001	4	292254	0.63	5.1	90
A4 Sidewall 1 Subsurface	5/4/2001	3	292248	<0.54	5.8	5.9
A4 Sidewall 2 Subsurface	5/4/2001	3	292253	<0.53	12	97
A5 Floor 1	5/4/2001	5	292261	<0.55	14	220
A5 Floor 2	5/4/2001	5	292262	<0.54	4.6	17
A5 Sidewall 1 Subsurface	5/4/2001	4	292241	<0.53	4.7	7.6
A5 Sidewall 1 Subsurface Dup.	5/4/2001	4	292242	<0.54	4.7	6.8
A5 Sidewall 2 Subsurface	5/4/2001	4	292244	<0.54	4.3	13
A5 Sidewall 3 Subsurface	5/4/2001	3.5	292246	<0.54	16	45
A6 Floor 1	4/26/2001	4	291428	<0.53	5.4	11
A6 Floor 1 Dup.	4/25/2001	4	291429	<0.53	4.9	10
A6 Floor 2	4/25/2001	3	291430	<0.53	9.6	94
A6 Sidewall 1 Subsurface	4/25/2001	2.5	291427	<0.55	6.5	8.6
A6 Sidewall 2 Subsurface	4/25/2001	3	291431	<0.54	5.5	5.5
A6 Sidewall 3 Subsurface	4/25/2001	3	291433	<5.6	5.4	8.7
A7 Floor 2	5/1/2001	5	291862	<0.54	5.2	5.8
A7 Sidewall 2 Subsurface	5/1/2001	3.5	291860	<0.54	8.9	15
A8 Floor 1	4/10/2001	5	290212	0.88	13	212
A8 Floor 2	4/10/2001	5	290215	<0.55	4.2	13
A8 Sidewall 1 Subsurface	4/10/2001	3	290213	<0.55	7.1	13
A8 Sidewall 2 Subsurface	4/10/2001	3	290216	<0.60	7.7	34

Tier II Non-Residential Cleanup Goals Subsurface Soil⁽¹⁾Tier II Residential Cleanup Goals Subsurface Soil⁽¹⁾400⁽²⁾

730

7,300

1,000⁽²⁾

Detected compound exceeds the VRF Tier II Non-Residential Cleanup Goal

Detected compound exceeds the VRF Tier II Residential Cleanup Goal

Detected compound is below the VRF Tier II Residential Cleanup Goal

Samples analyzed using EPA Method Series 6000/7000

mg/kg = milligrams per kilogram

(1) Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide.

Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Response, July 1996.

(2) IDEM VRF Interoffice Memo dated on January 26, 1998.

Excavation Confirmation Subsurface Soil Analytical Results for Metals (mg/kg)

Former General Motors Corporation

Allison Gas Turbine Division, Plant 10

Indianapolis, Indiana

IDEM VRF #6991004

KERAMIDA Project No. 2829E

Table 13c

Table 14
Microcosm Study Results
Former General Motors Corporation
Allison Gas Turbine, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project #2829E

Sample ID	Aqueous TCE Concentration by Day (ug/L)					Soil TCE Concentration by Day (mg/kg)	Aqueous TOC Concentration (mg/L) @ 28 days
	0	7	14	21	28	28	
RV0 (0 ppm TOC)	670	540	550	440	410	16	1.2
RV1 (100 ppm TOC)	750	520	550	440	410	9.9	77
RV2 (300 ppm TOC)	830	550	600	480	440	9.3	260
RV3 (1000 ppm TOC)	950	260	450	380	390	11	1100

Table 14 - Microcosm Study Results
Page 1 of 1

Table 15
 "Hot Spot" Soil Analytical Results for VOCs (mg/kg)
 Former General Motors Corporation
 Allison Gas Turbine Division, Plant 10
 Indianapolis, Indiana
 IDEM VRP #6991004
 KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Bromodichloromethane	n-Butylbenzene	sec-Butylbenzene	1,2-Dichloroethane	1,1-Dichloroethylene	cis-1,2-Dichloroethylene	trans-1,2-Dichloroethene	1,1-Dichloropropene	Ethylbenzene	Isopropylbenzene	p-Isopropyltoluene	Methylene chloride	Naphthalene	n-Propylbenzene	1,1,1,2-Tetrachloroethane	Tetrachloroethylene	1,1,2-Trichloroethane	Trichloroethylene	All Other VOCs
HS-NW	8/28/2003	5	874031	<0.042	<0.042	1.66	<0.042	<0.042	66.2	0.063	<0.042	0.499	0.741	1.82	<0.084	4.19	1.91	<0.042	0.185	<0.042	7.87	ND
HS-EW	8/28/2003	5	874032	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.268	<0.0050	<0.0050	0.0088	0.0162	0.0286	<0.0100	0.0302	0.0319	<0.0050	0.0075	<0.0050	0.742	ND
HS-SW	8/28/2003	5	874033	<0.250	36.9	14.1	<0.250	<0.250	167	0.261	<0.250	2.54	4.21	16.8	<0.500	12.8	11.8	<0.250	0.451	<0.250	56	ND
HS-WW	8/28/2003	5	874034	<0.250	<0.250	1.27	<0.250	<0.250	116	0.288	<0.250	0.365	0.484	1.4	<0.500	3.13	1.31	<0.250	<0.250	<0.250	0.302	ND
Tier II Residential Cleanup Goals Subsurface Soil ⁽¹⁾				0.000389 ⁽²⁾	33.5 ⁽²⁾	30.1 ⁽²⁾	0.025	0.084	17.14	3.23 ⁽²⁾	0.00764 ⁽²⁾	834.372	185 ⁽²⁾	441 ⁽²⁾	0.0255 ⁽²⁾	1,767.785	33.5 ⁽²⁾	0.076	0.227	0.035	0.076	NA
Tier II Non-Residential Cleanup Goals Subsurface Soil ⁽¹⁾				0.692 ⁽²⁾	972 ⁽²⁾	725 ⁽²⁾	0.37	0.08	102.49	193 ⁽²⁾	1.36 ⁽²⁾	1,000	185 ⁽²⁾	1,000 ⁽²⁾	10.9 ⁽²⁾	10,000	972 ⁽²⁾	7.24	8.01	1.05	25.73	NA

VOCs = Volatile Organic Compounds

Samples analyzed using EPA SW-846 Method 8250b

mg/kg = milligrams per kilogram

ND = Not Detected

NA = Not Applicable

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Calculated using surrogate toxicity values and Tier II equations.

Table 15 - "Hot Spot" Soil - VOCs
 Page 1 of 1

Table 16

"Hot Spot" Soil Analytical Results for Lead (mg/kg)
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

Sample No.	Date Sampled	Sample Depth (feet)	Lab Sample No.	Total Lead
HS-NW	8/28/2003	6	874031	46.5
HS-EW	8/28/2003	6	874032	100
HS-SW	8/28/2003	6	874033	59.4
HS-WW	8/28/2003	6	874034	11.4
Tier II Residential Cleanup Goals Subsurface Soil ⁽¹⁾				400 ⁽³⁾
Tier II Non-Residential Cleanup Goals Subsurface Soil ⁽¹⁾				1,000 ⁽³⁾
Common Background Ranges ⁽²⁾				2 - 200

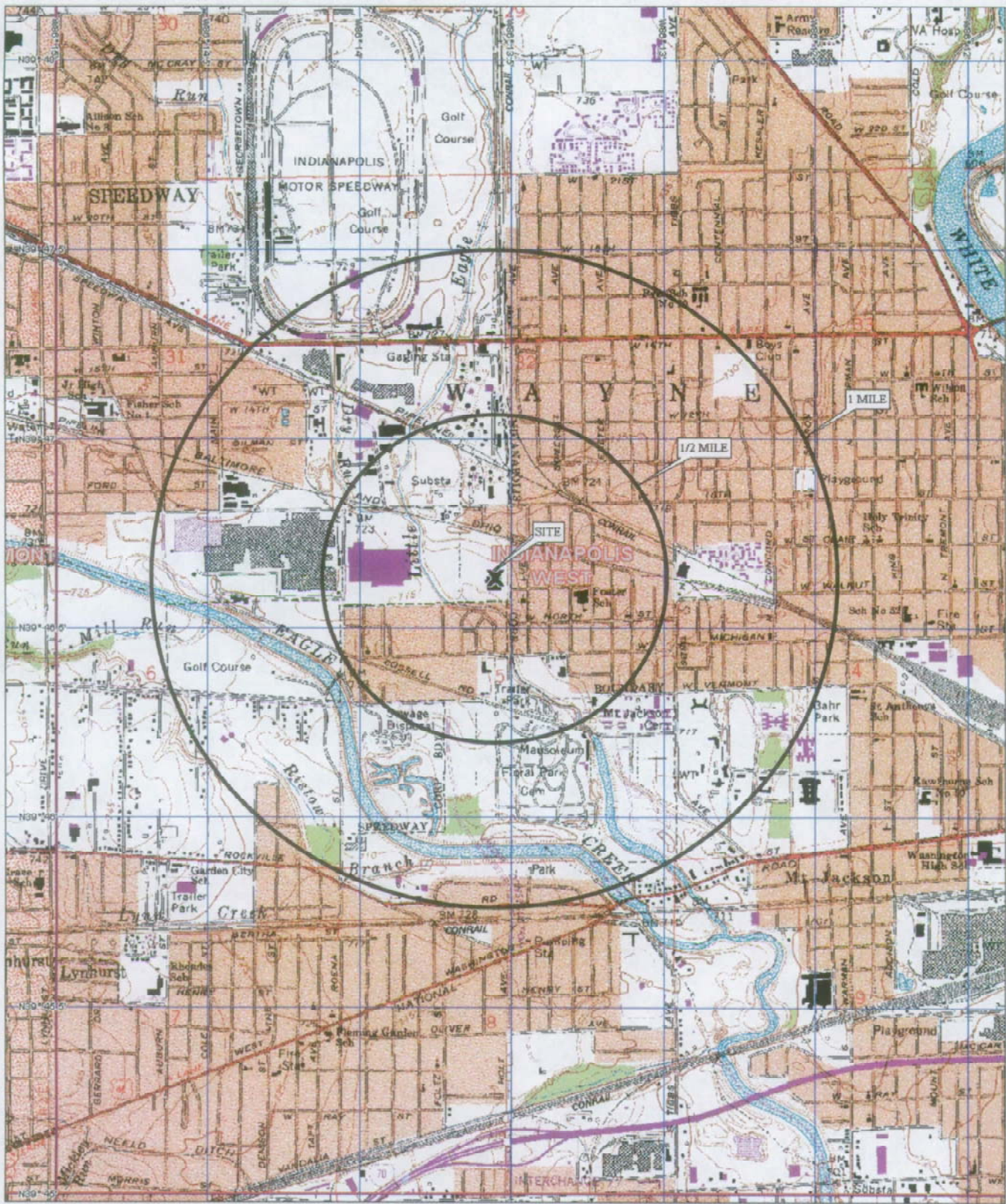
Samples analyzed using EPA Method Series 6010

mg/kg = milligrams per kilogram

⁽¹⁾ Indiana Department of Environmental Management Voluntary Remediation Program Resource Guide, Appendix F Tier II Cleanup Goals-Human Health Evaluation by Office of Environmental Response, July 1996.

⁽²⁾ Source: James Dragun. The Soil Chemistry of Hazardous Materials Table 3.1 Native Soil Concentration of Various Elements: p.229, 1998.

⁽³⁾ IDEM VRP Interoffice Memo dated on January 26, 1996.



3-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS

693 ft Scale: 1:24,000 Detail 13-0 Datum: WGS84

KERAMIDA Environmental, Inc.
330 North College Avenue
Indianapolis, Indiana 46202



(317) 685-6600 FAX (317) 685-6610

Figure 1
Site Location Map
Former General Motors Corporaion
Allison Gas Turbine Plant 10
700 North Olin Avenue
Indianapolis, IN

Prepared by: Becky Cassinelli
Approved by: Kris Buckles
Date: 9/29/2002
Project Number: 2629E



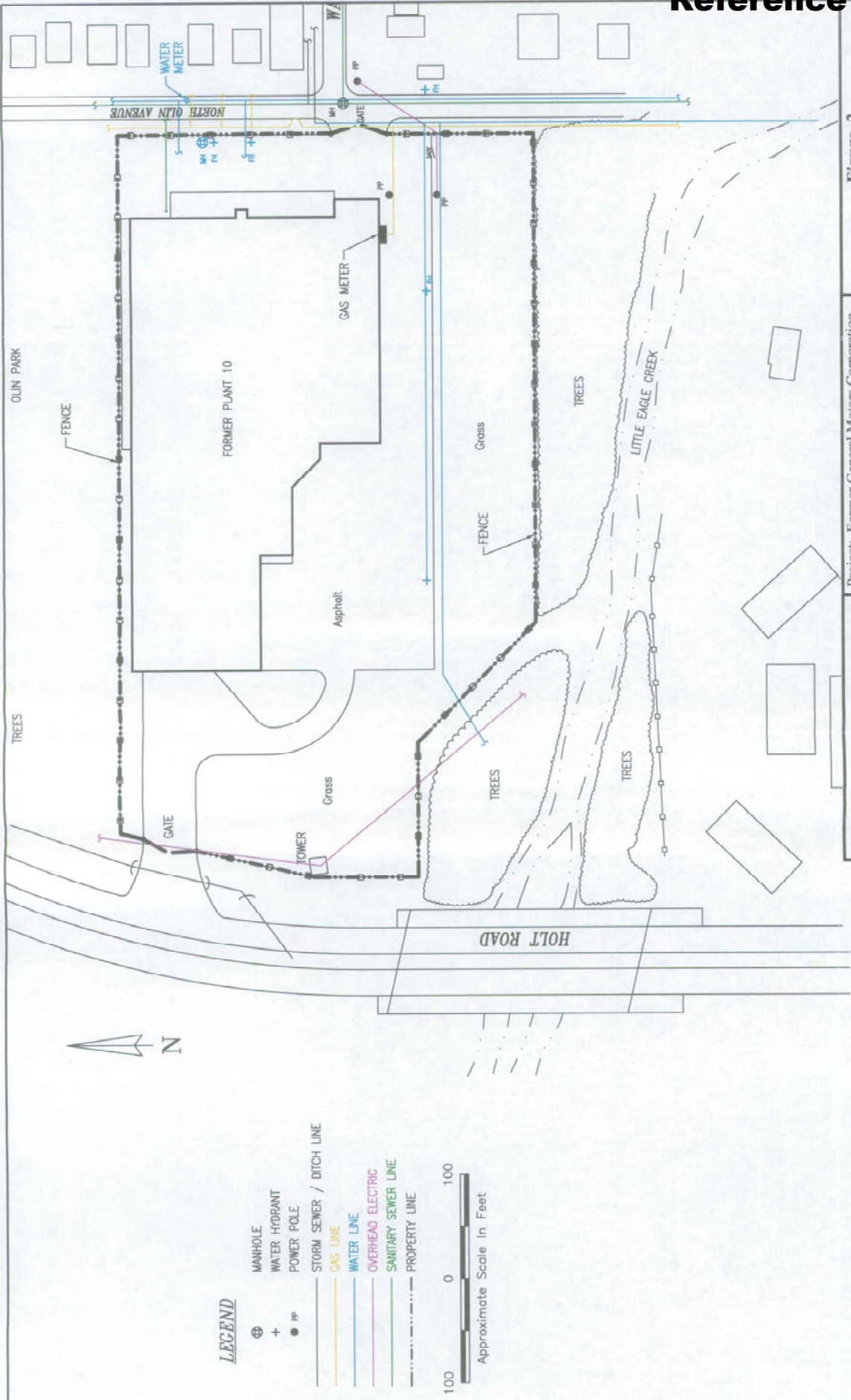
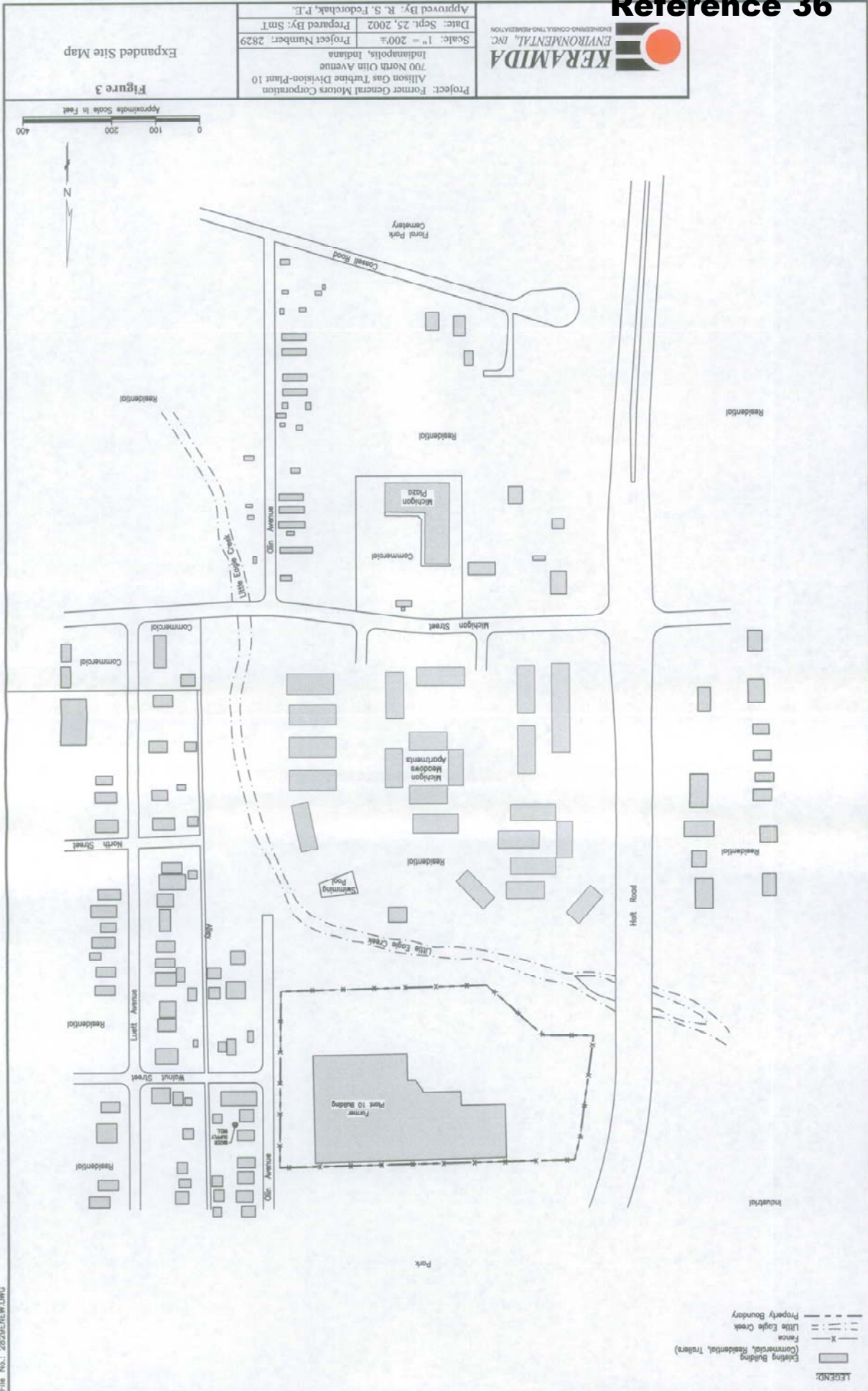


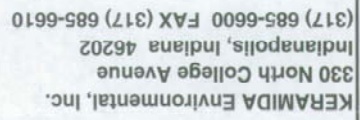
Figure 2

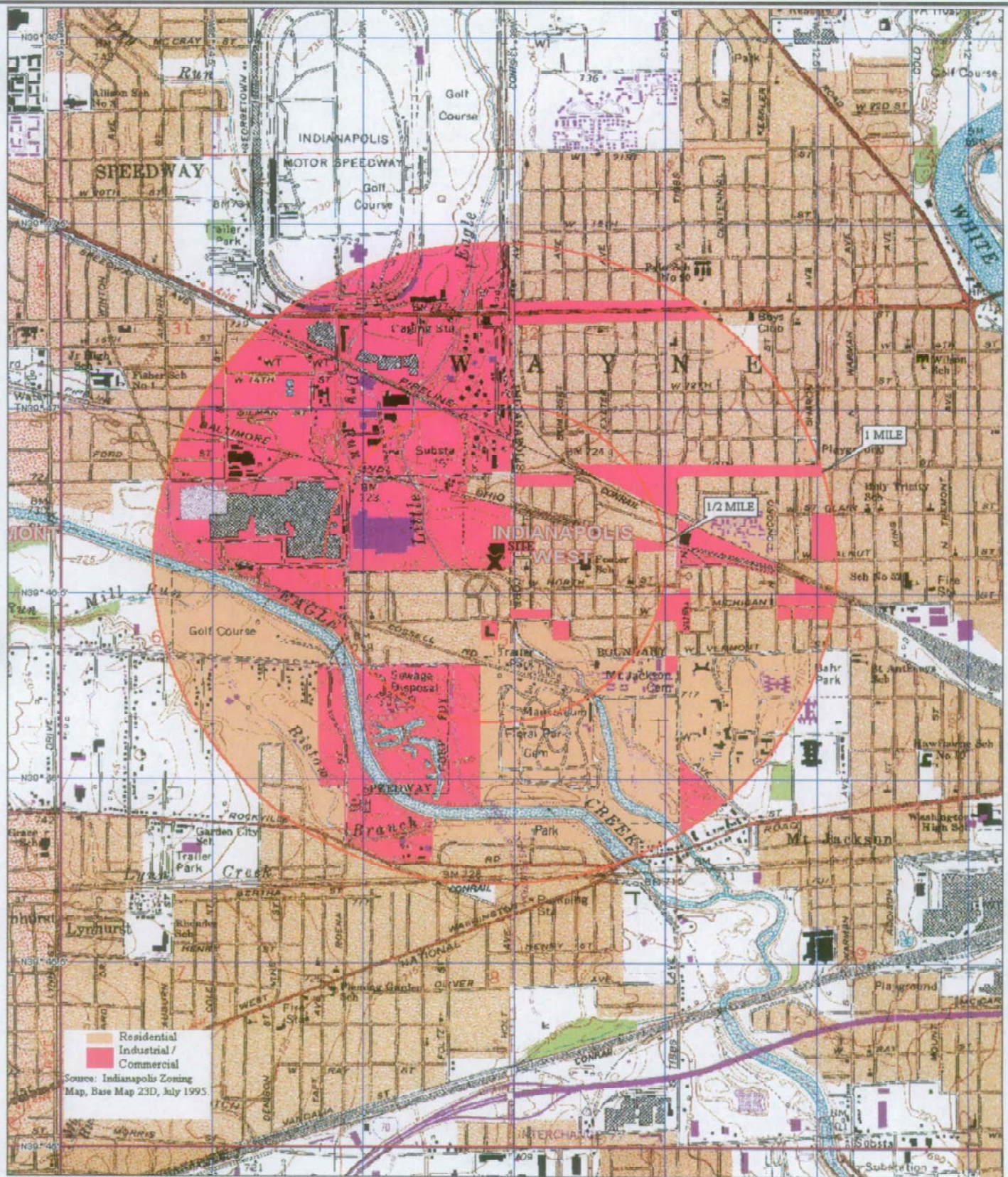
Site Map

Project: Former General Motors Corporation
Allison Gas Turbine Division-Plant 10
700 North Olin Avenue
Indianapolis, Indiana
Scale: 1" = 100'
Prepared By: MHJ
Project Number: 2829E / Approved By: FDW
Date: October 1, 2002









KERAMIDA Environmental, Inc.
330 North College Avenue
Indianapolis, Indiana 46202
(317) 685-6600 FAX (317) 685-6610



Figure 5
Site and Surrounding Area Use Map
Former General Motors Corporation
Allison Gas Turbine Division, Plant 10
700 North Olin Avenue
Indianapolis, IN

Prepared by: Stan Hunnicutt
Approved by: Frank West
Date: 12/4/2001
Project Number: 2829 E





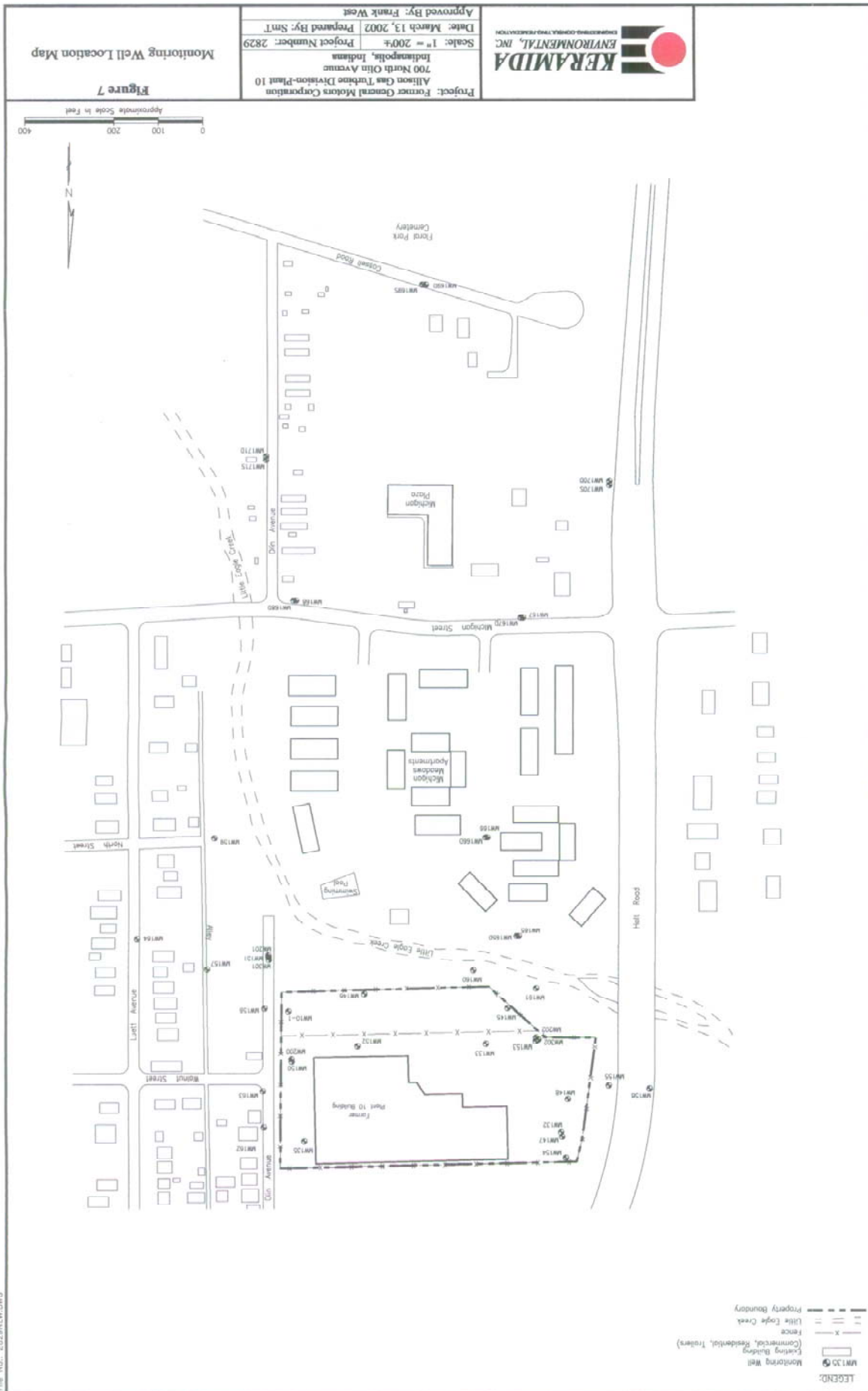
Project: Former General Motors Corporation
Allison Gas Turbine Division-Plant 10
Indianapolis, Indiana
Scale: 1" = 200'
Date: 09.21.03
Prepared By: MHJ
Approved By: Frank West

Soil Boring Location Map

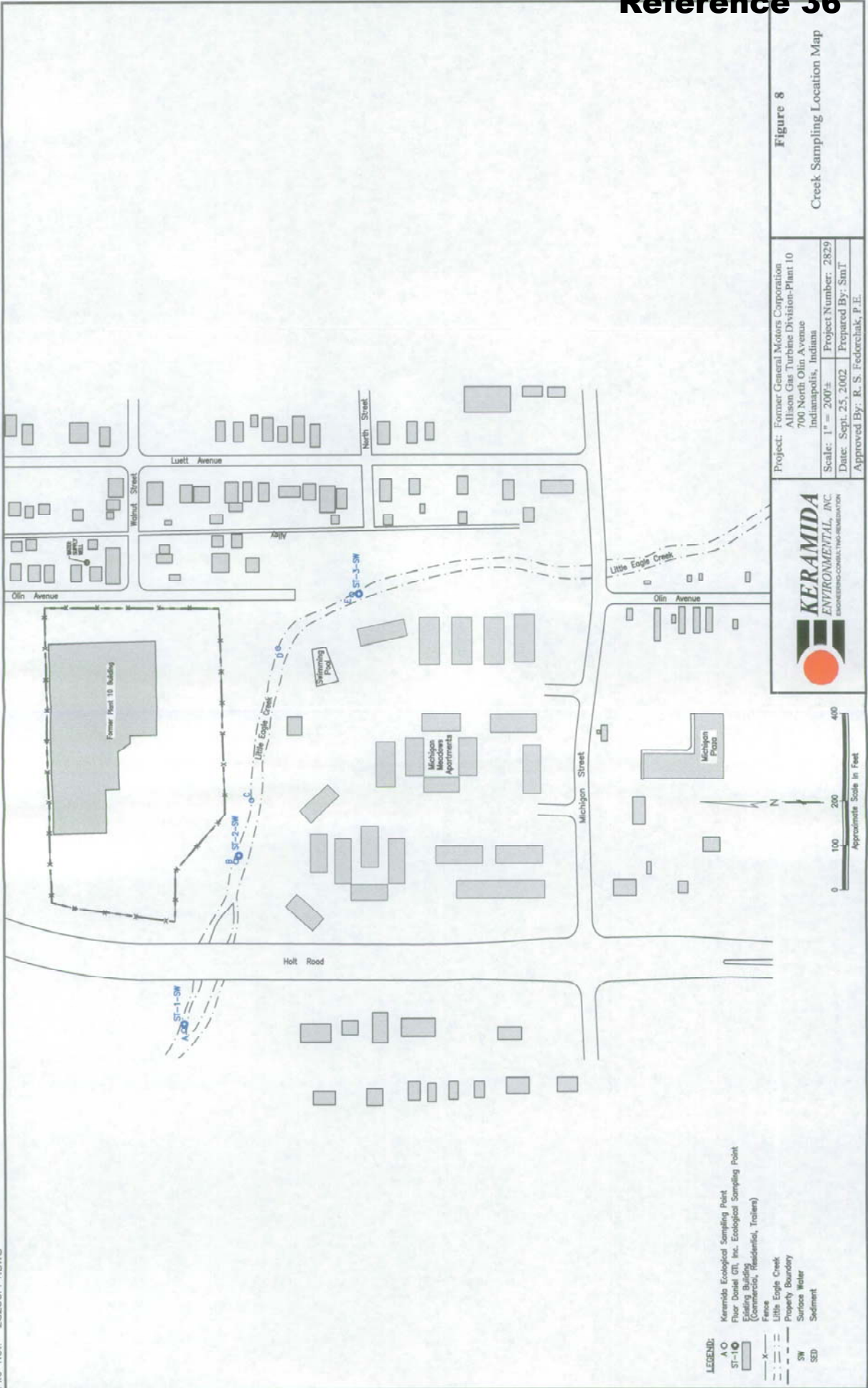
Figure 6

Approximate Scale in Feet
0 100 200 400

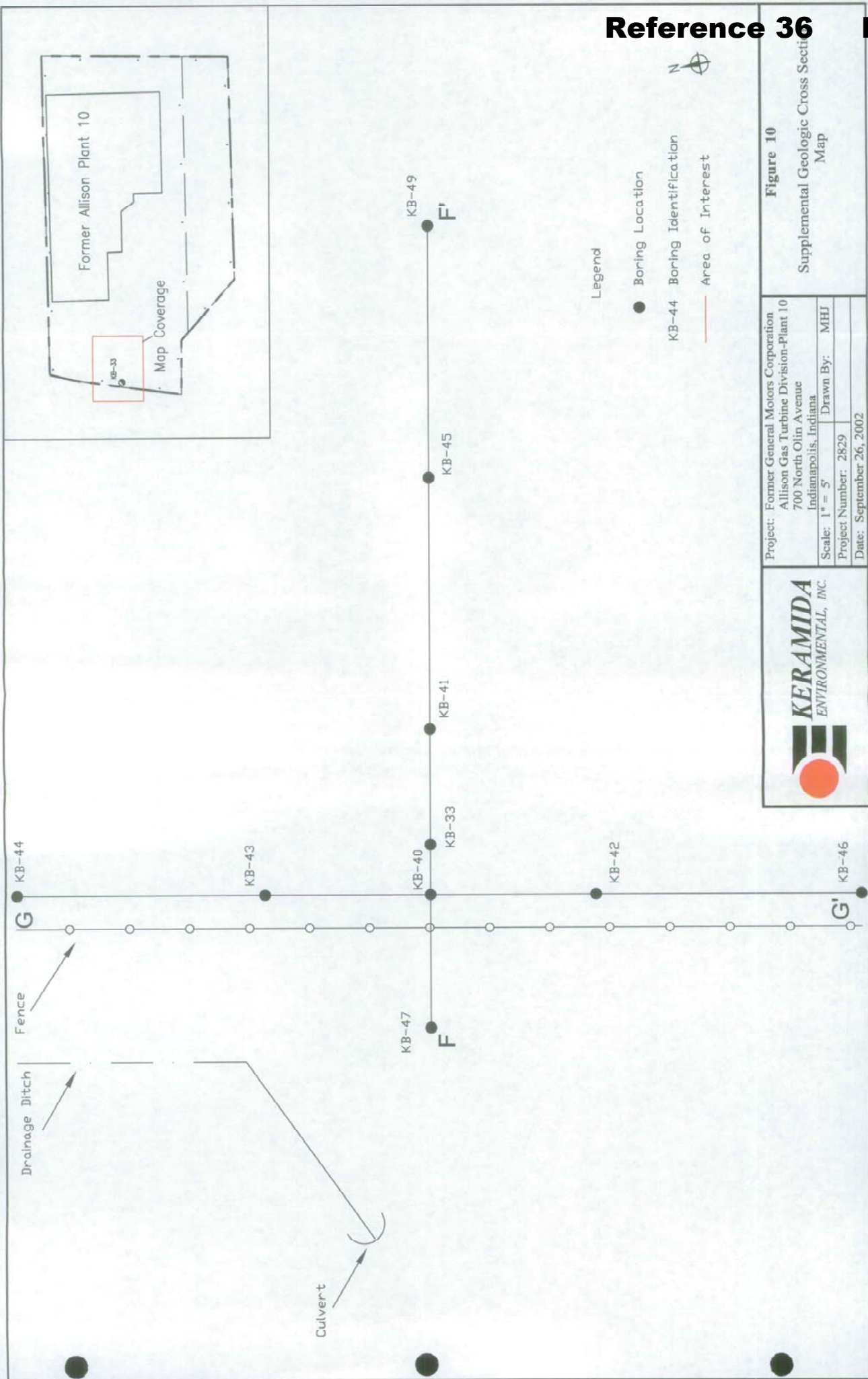




File No.: 2829ef14.DWG







Legend

- Boring Location
- KB-44 Boring Identification
- Area of Interest

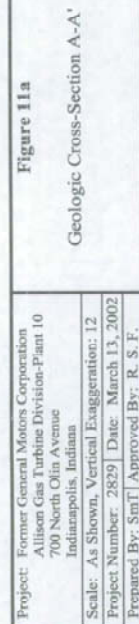


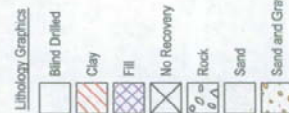
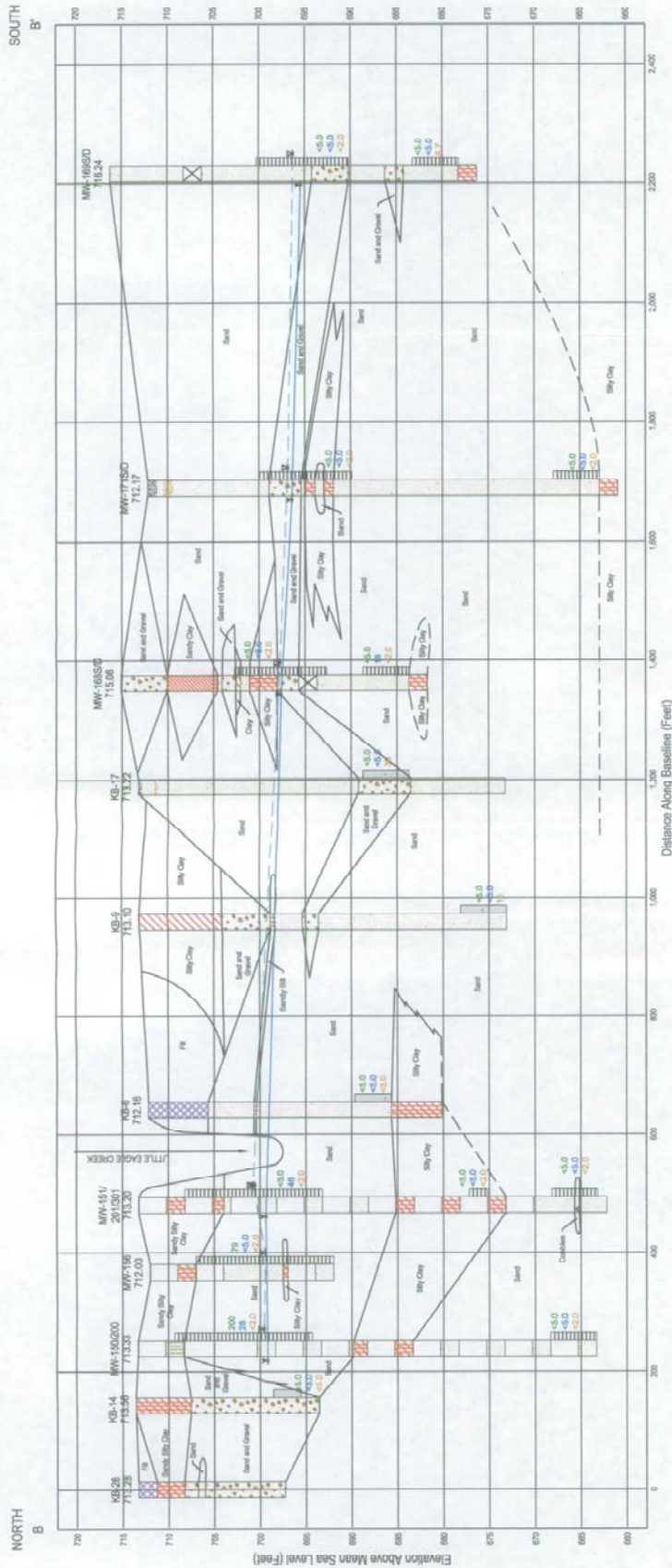
Project: Former General Motors Corporation
Allison Gas Turbine Division-Plant 10
700 North Olin Avenue
Indianapolis, Indiana

Scale: 1" = 5'	Drawn By: MHJ
Project Number: 2829	
Date: September 26, 2002	



Figure 10
Supplemental Geologic Cross Section
Map





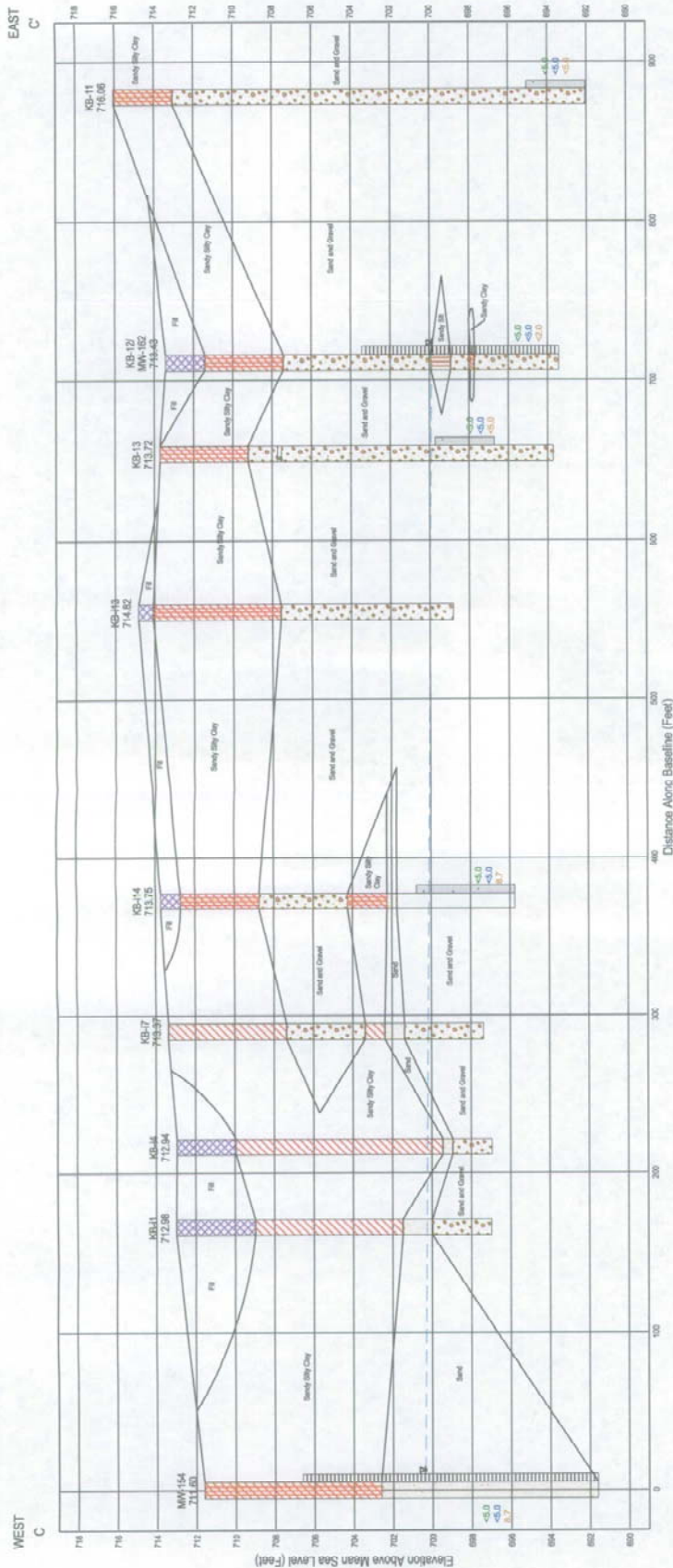
General Note:
Subsurface conditions shown between boring locations are interpreted, actual conditions may vary.



Project: Former General Motors Corporation
Allison Gas Turbine Division-Plant 10
700 North Olin Avenue
Indianapolis, Indiana
Scale: As Shown, Vertical Exaggeration: 16
Project Number: 2629 Date: March 13, 2002
Prepared By: SmT Approved By: R. S. F.

Figure 11b

Geologic Cross-Section B-B'



- Lithology Graphics**
- Blind Drilled
 - Clay
 - Fill
 - No Recovery
 - Rock
 - Sand
 - Sand and Gravel

- Well Graphics**
- Sandy Clay
 - Sandy Silt
 - Sandy Silty Clay
 - Silt
 - Silty Clay
 - Silty Sand
- Well Graphics**
- Screened Interval
 - Measured Groundwater Elevation (Deep Wells) - 01/30/02
 - Measured Groundwater Elevation (Shallow Wells) - 01/30/02
 - Groundwater Analytical Data (ug/L)
 - 110 Trichloroethene
 - 170 cis-1,2 Dichloroethene
 - 6.7 Vinyl Chloride

- Graphics**
- Geoprobe Groundwater Sample Interval
 - 711.72 Ground Elevation (Feet)
 - Shallow Well Groundwater Potentiometric Surface Level
 - Deep Well Groundwater Potentiometric Surface Level
 - Inferred Lithologic Contact

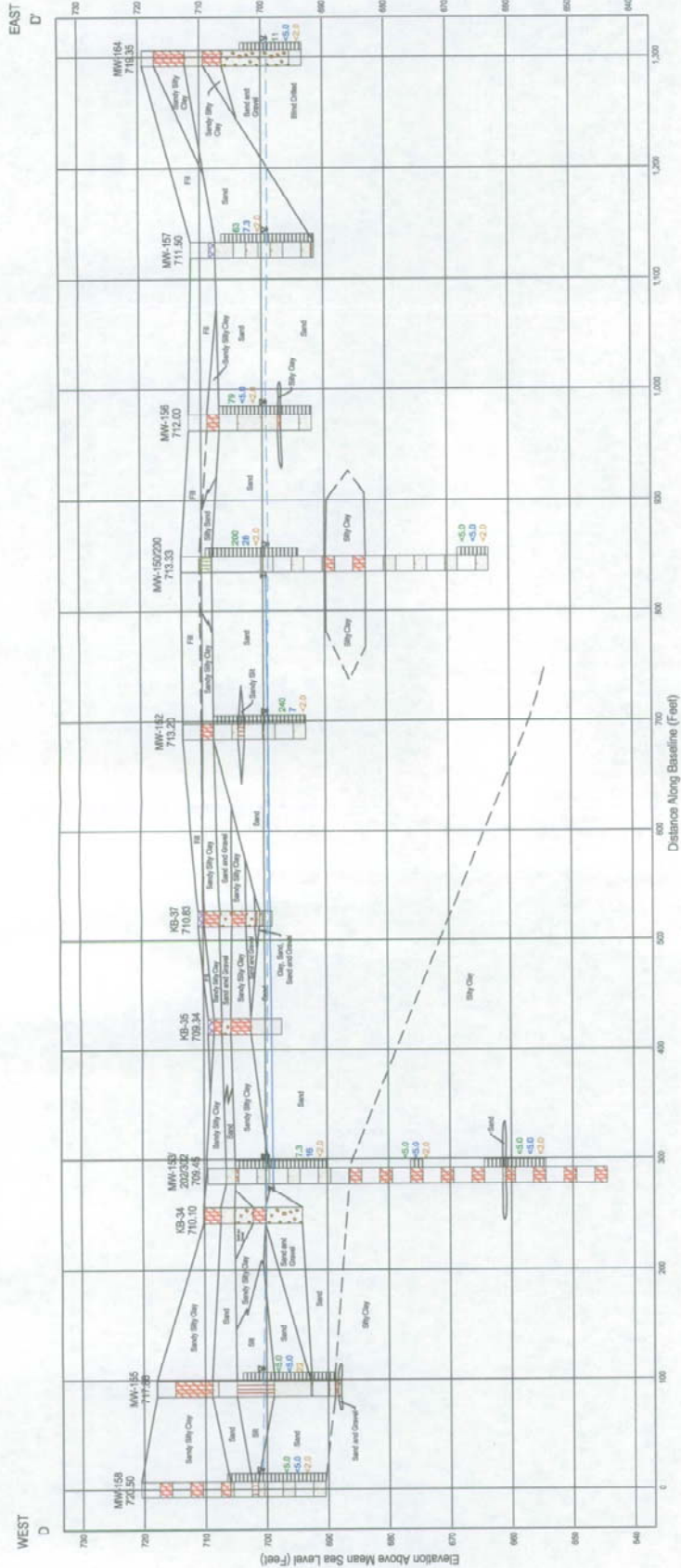
General Note:
Subsurface conditions shown between boring locations are interpreted; actual conditions may vary.



Project: Former General Motors Corporation
Allison Gas Turbine Division-Plant 10
700 North Olin Avenue
Indianapolis, Indiana
Scale: As Shown, Vertical Exaggeration: 13.64
Project Number: 2829 | Date: March 13, 2002
Prepared By: Smt | Approved By: R. S. F.

Figure 11c
Geologic Cross-Section C-C'

File No: 2829dd-btize.dwg



Lithology Graphics

Blind Drilled

Clay

Fill

No Recovery

Rock

Sand

Sand and Gravel

Sandy Clay

Sandy Silt

Sandy Silty Clay

Silt

Silty Clay

Silty Sand

Well Graphics

Screened Interval

Measured Groundwater Elevation (Deep Wells) - 01/30/02

Measured Groundwater Elevation (Shallow Wells) - 01/30/02

Groundwater Analytical Data (ug/L)

110 Trichloroethene

170 cis-1,2 Dichloroethene

6.7 Vinyl Chloride

Note:
Analyte concentrations are from geoprobe borings or from the June 2001 sampling event at each monitoring well.

Graphics

Geoprobe Groundwater Sample Interval

711.72 Ground Elevation (Feet)

Shallow Well Groundwater Potentiometric Surface Level

Deep Well Groundwater Potentiometric Surface Level

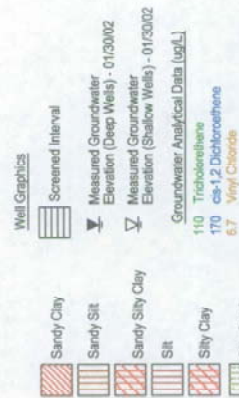
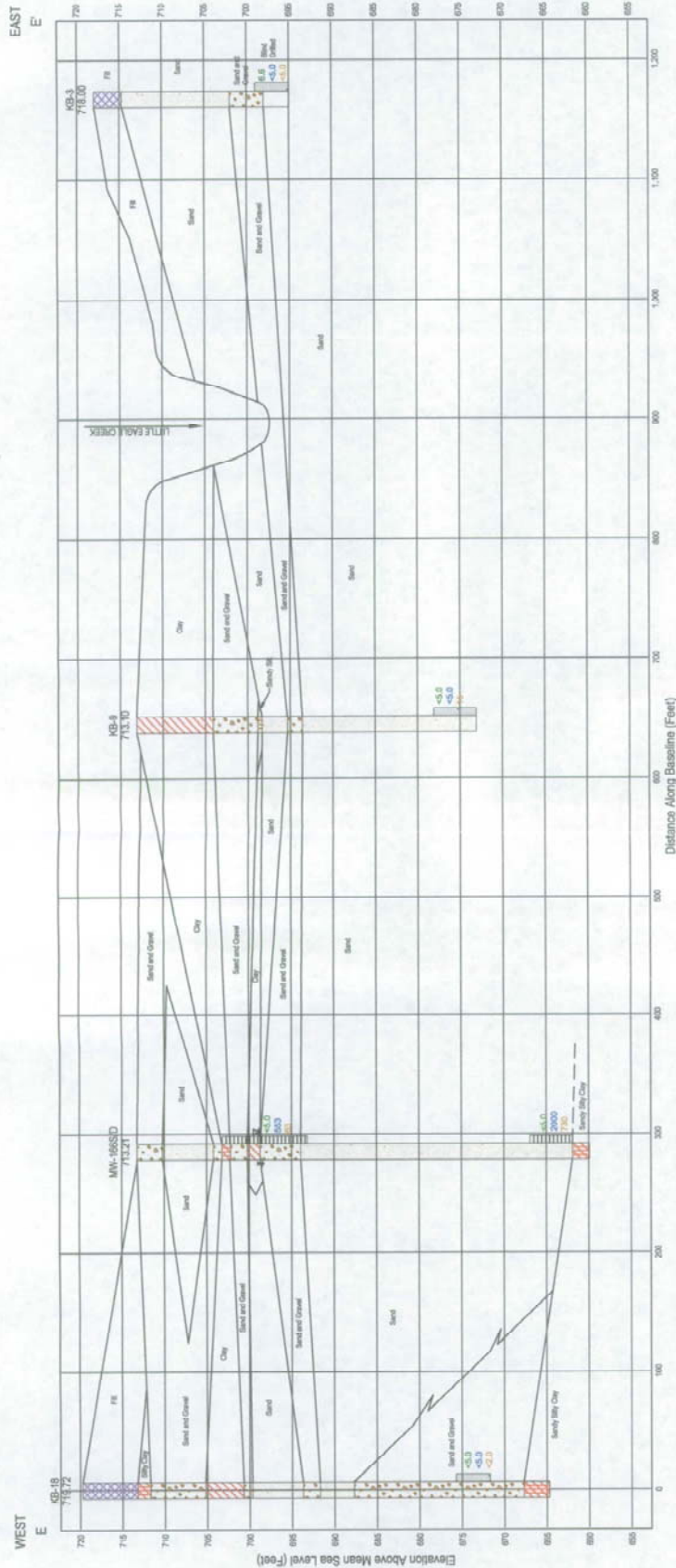
Inferred Lithologic Contact

General Note:
Subsurface conditions shown between boring locations are interpreted, actual conditions may vary.



Project: Former General Motors Corporation
Allison Gas Turbine Division-Plant 10
700 North Olin Avenue
Indianapolis, Indiana
Scale: As Shown, Vertical Exaggeration: 5.65
Project Number: 2829 Date: March 13, 2002
Prepared By: SmT Approved By: R. S. F.

Figure 11d
Geologic Cross-Section D-D'



Note: Analyte concentrations are from geoprobe borings or from the June 2001 sampling event at each monitoring well.



General Note:
Subsurface conditions shown between boring locations are interpreted; actual conditions may vary.



Project: Former General Motors Corporation
Allison Gas Turbine Division-Plant 10
700 North Olin Avenue
Indianapolis, Indiana

Scale: As Shown, Vertical Exaggeration: 8

Project Number: 2829 | **Date:** March 13, 2002

Prepared By: SmT | **Approved By:** R. S. F.

Figure 11e
Geologic Cross-Section E-E

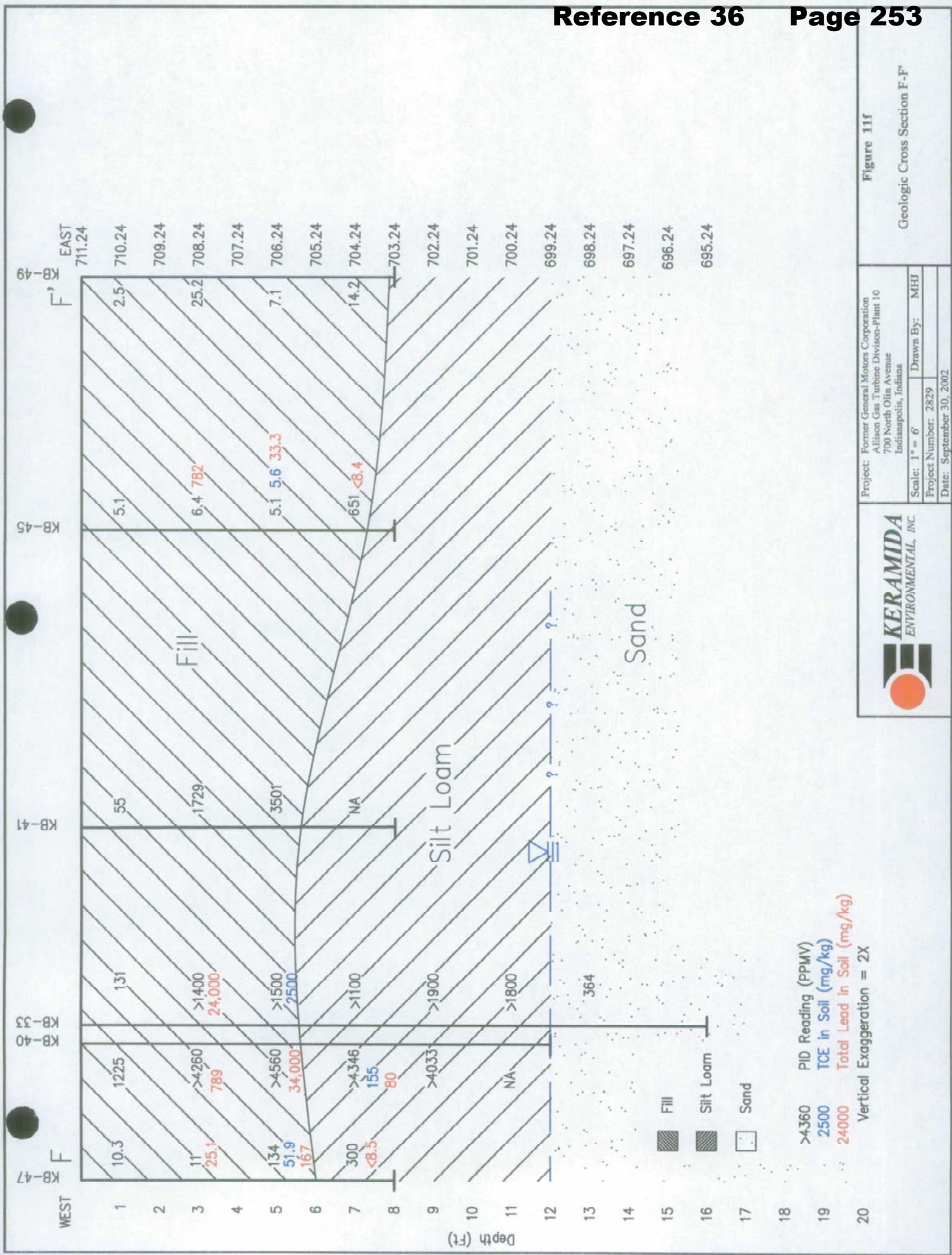


Figure 11f
Geologic Cross Section F-F'

Project: Former General Motors Corporation
Allison Gas Turbine Division-Plant 10
700 North Olin Avenue
Indianapolis, Indiana

Scale: 1" = 6'
Project Number: 2829
Date: September 30, 2002

Drawn By: MHJ



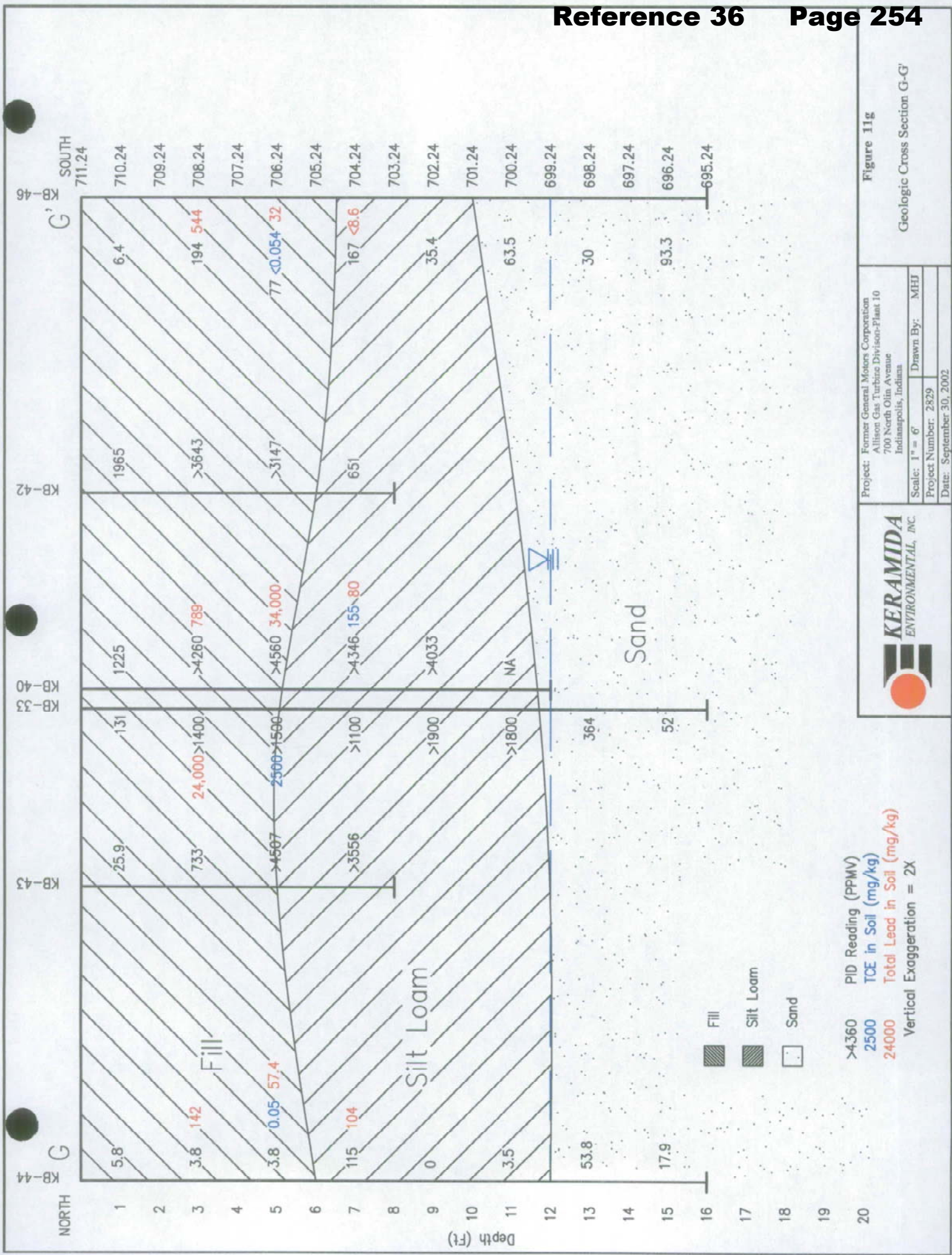


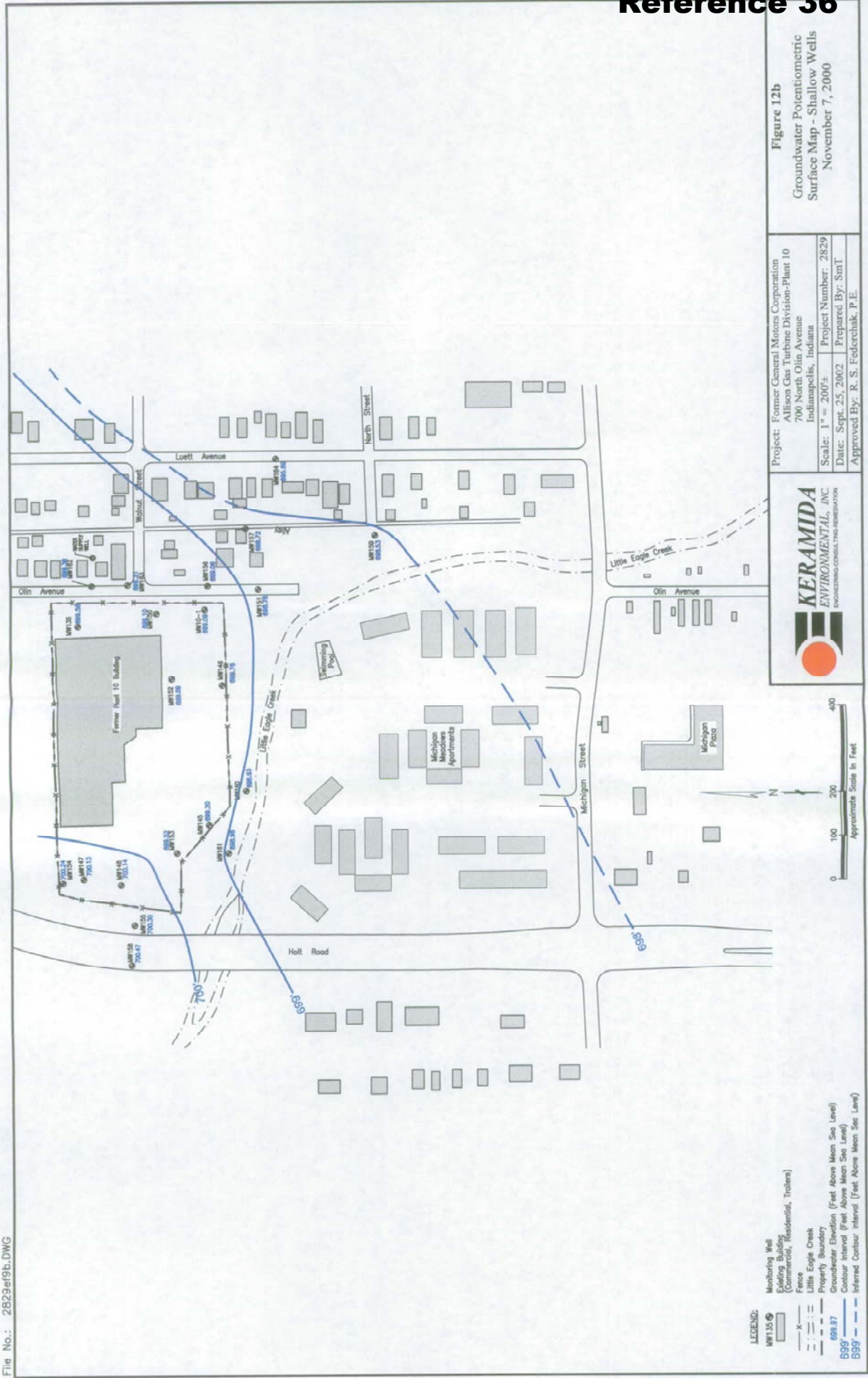
Figure 11g
Geologic Cross Section G-G'

Project: Former General Motors Corporation
Allison Gas Turbine Division-Plant 10
700 North Olin Avenue
Indianapolis, Indiana

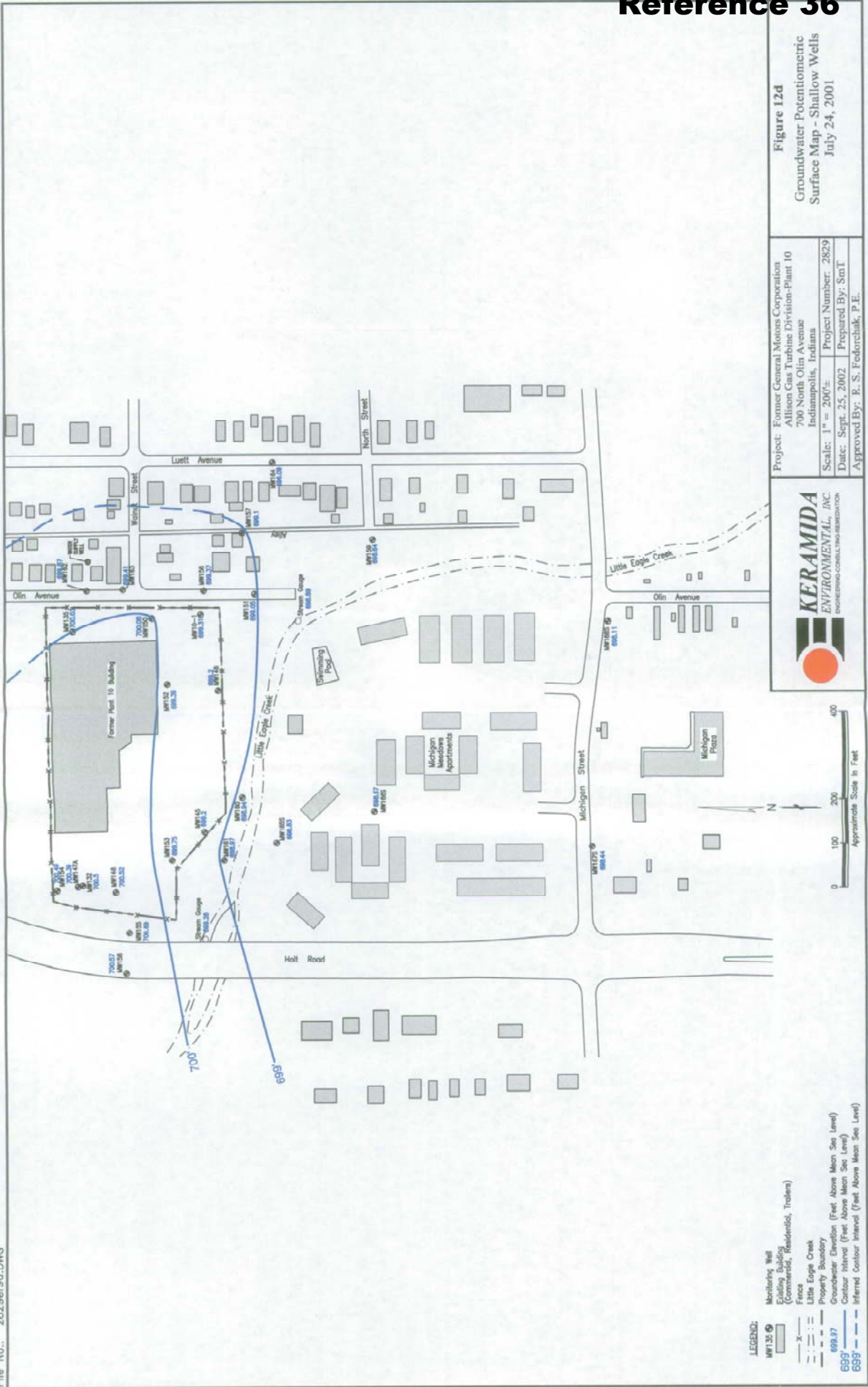
Scale: 1" = 6'
Project Number: 2829
Date: September 30, 2002

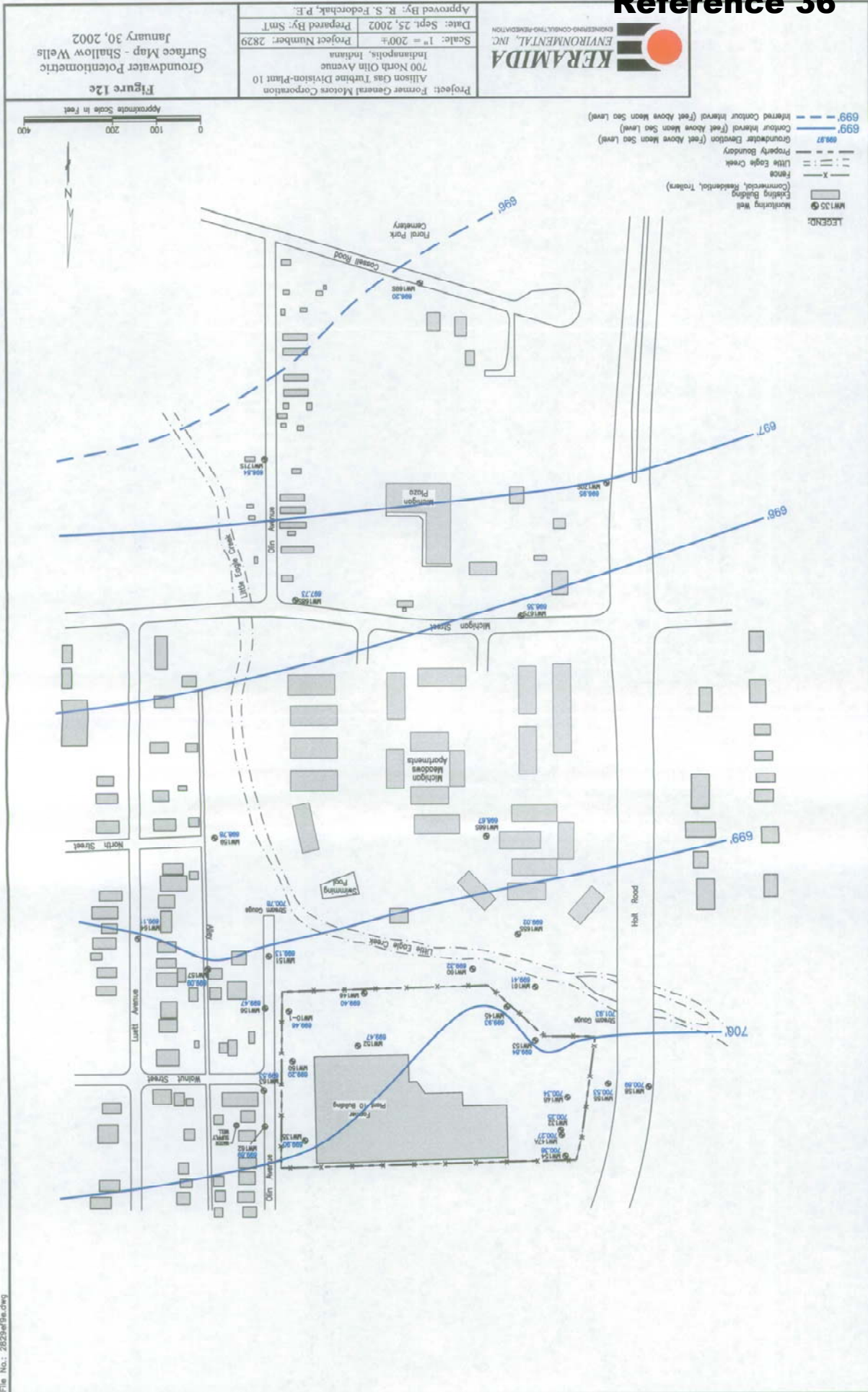
Drawn By: MHJ

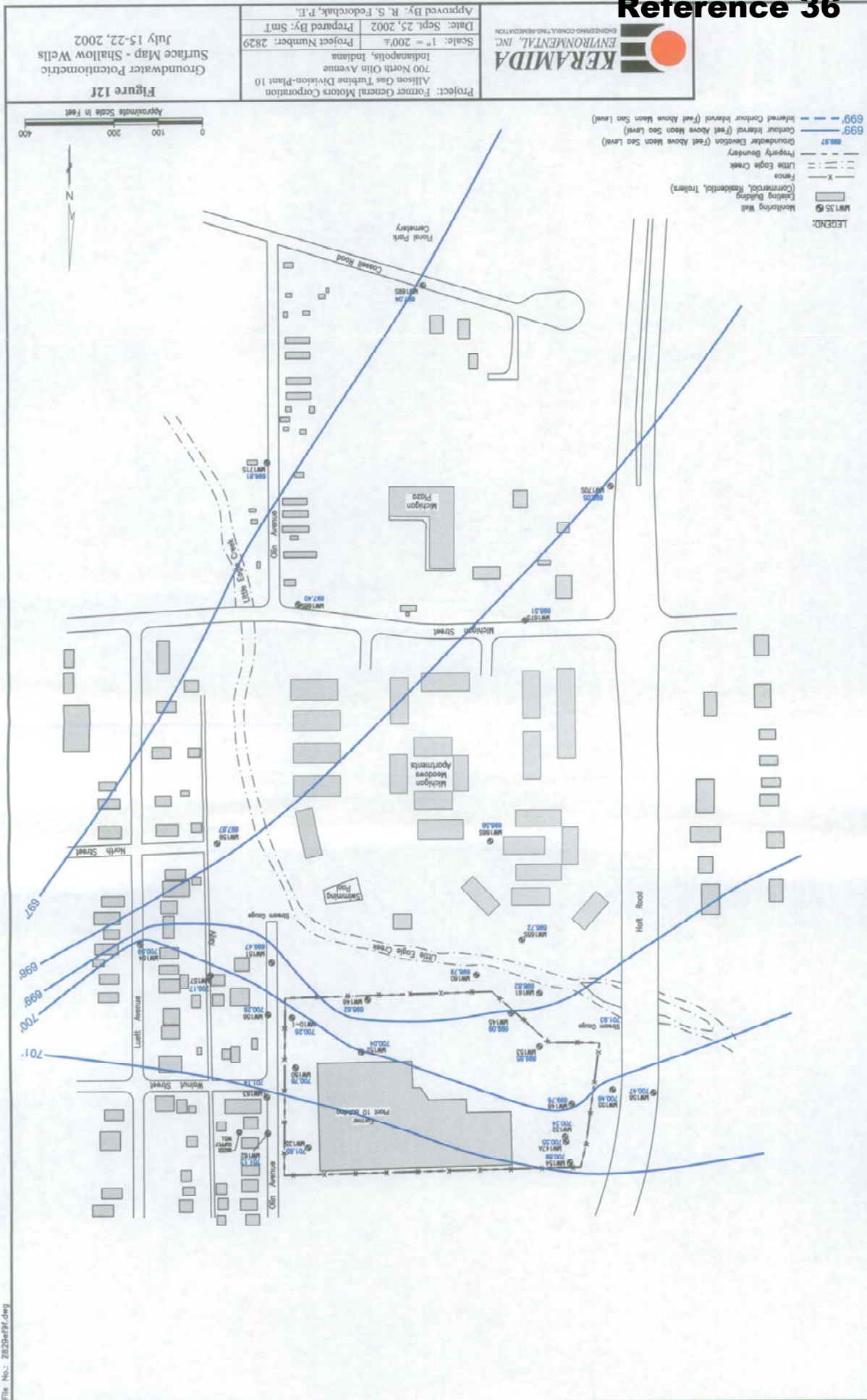


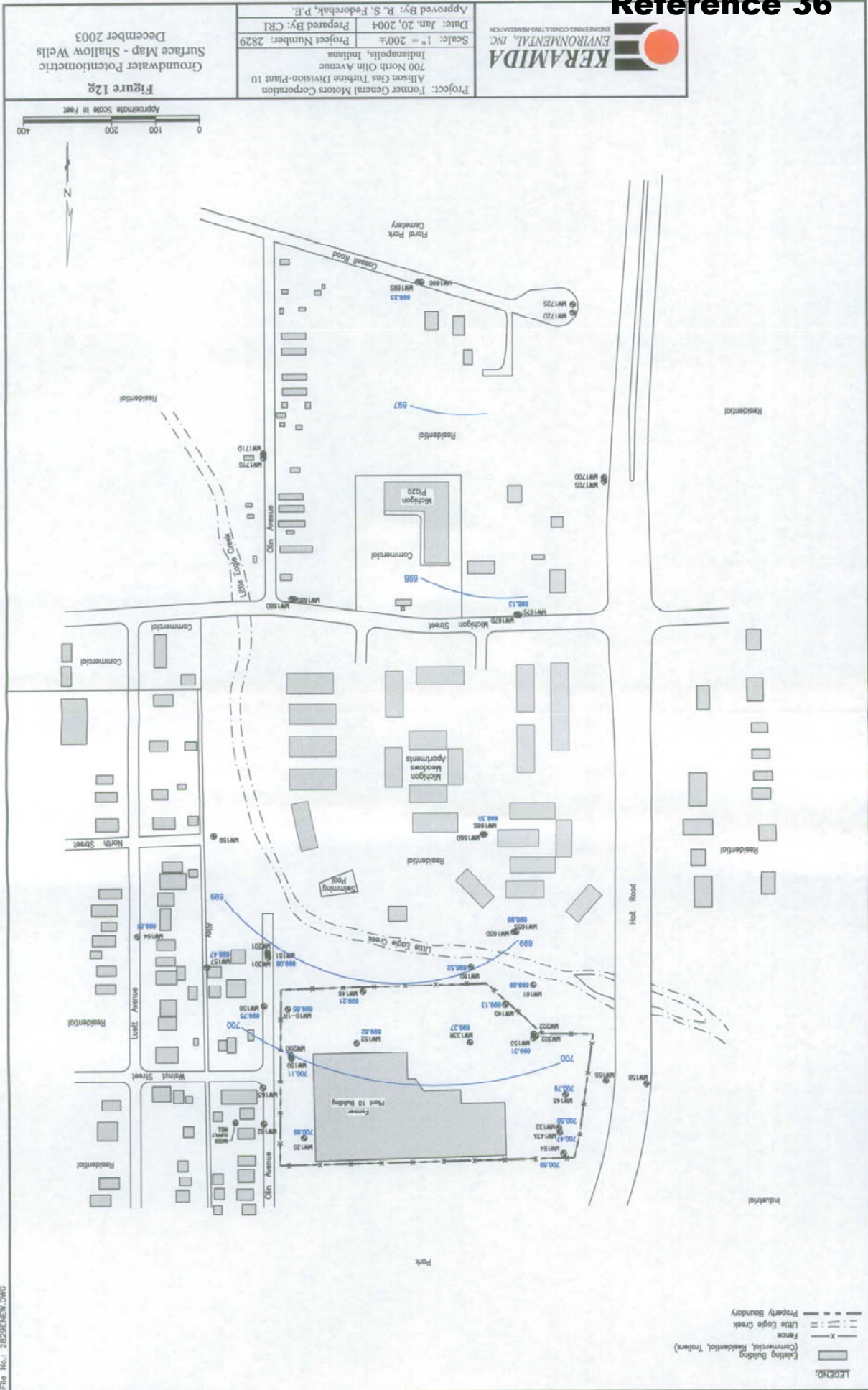


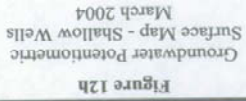
File No.: 2829et9d.DWG

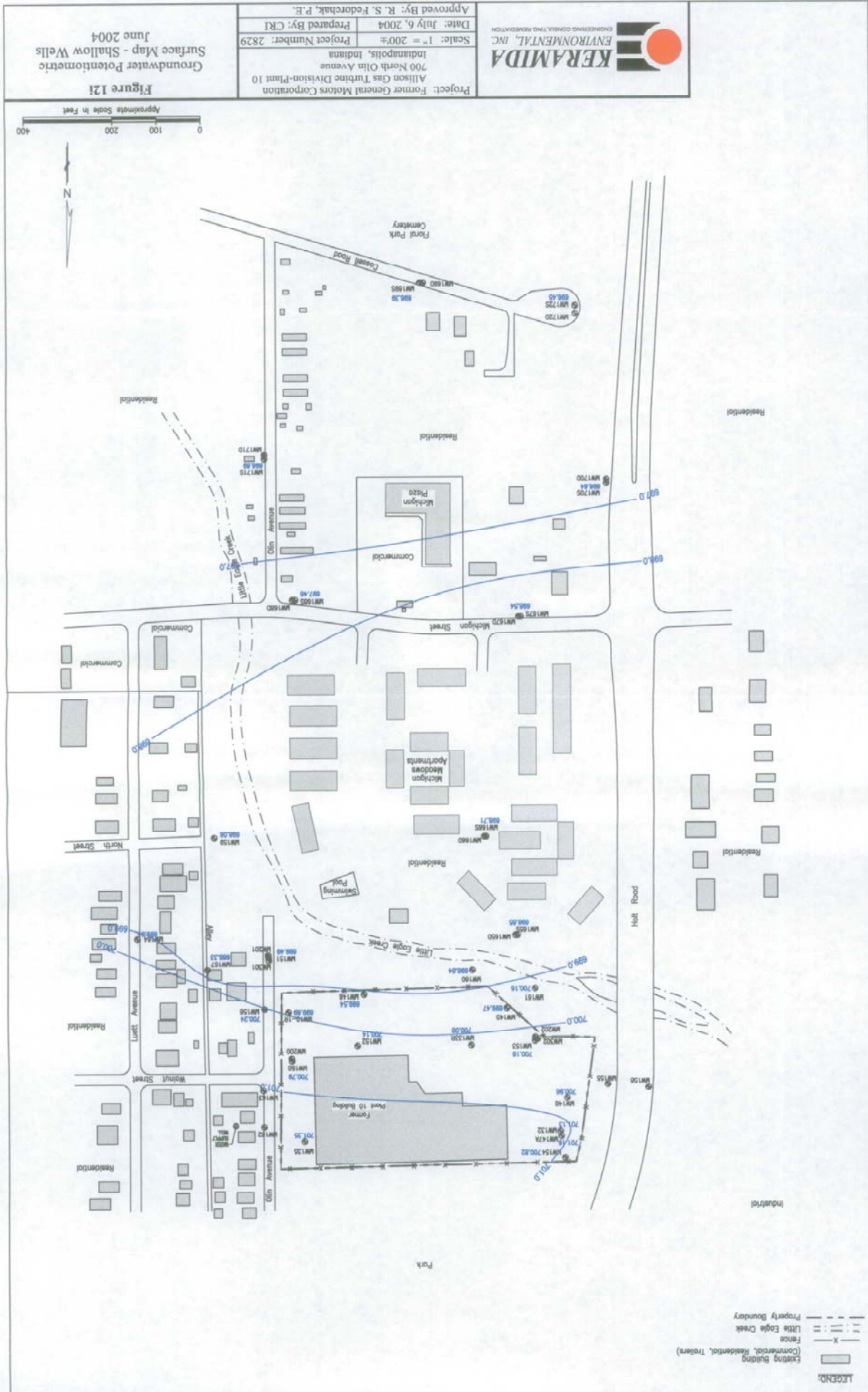


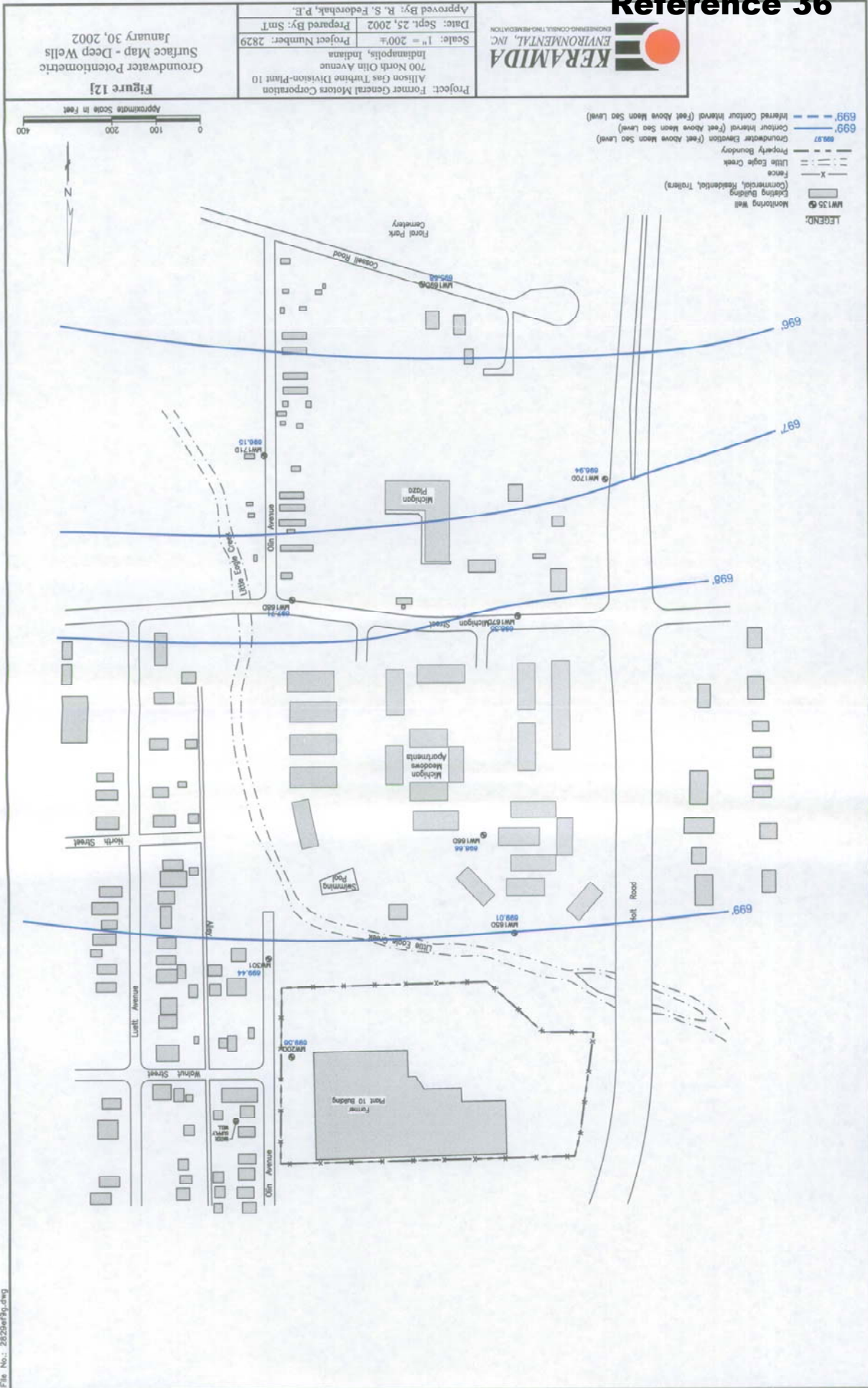


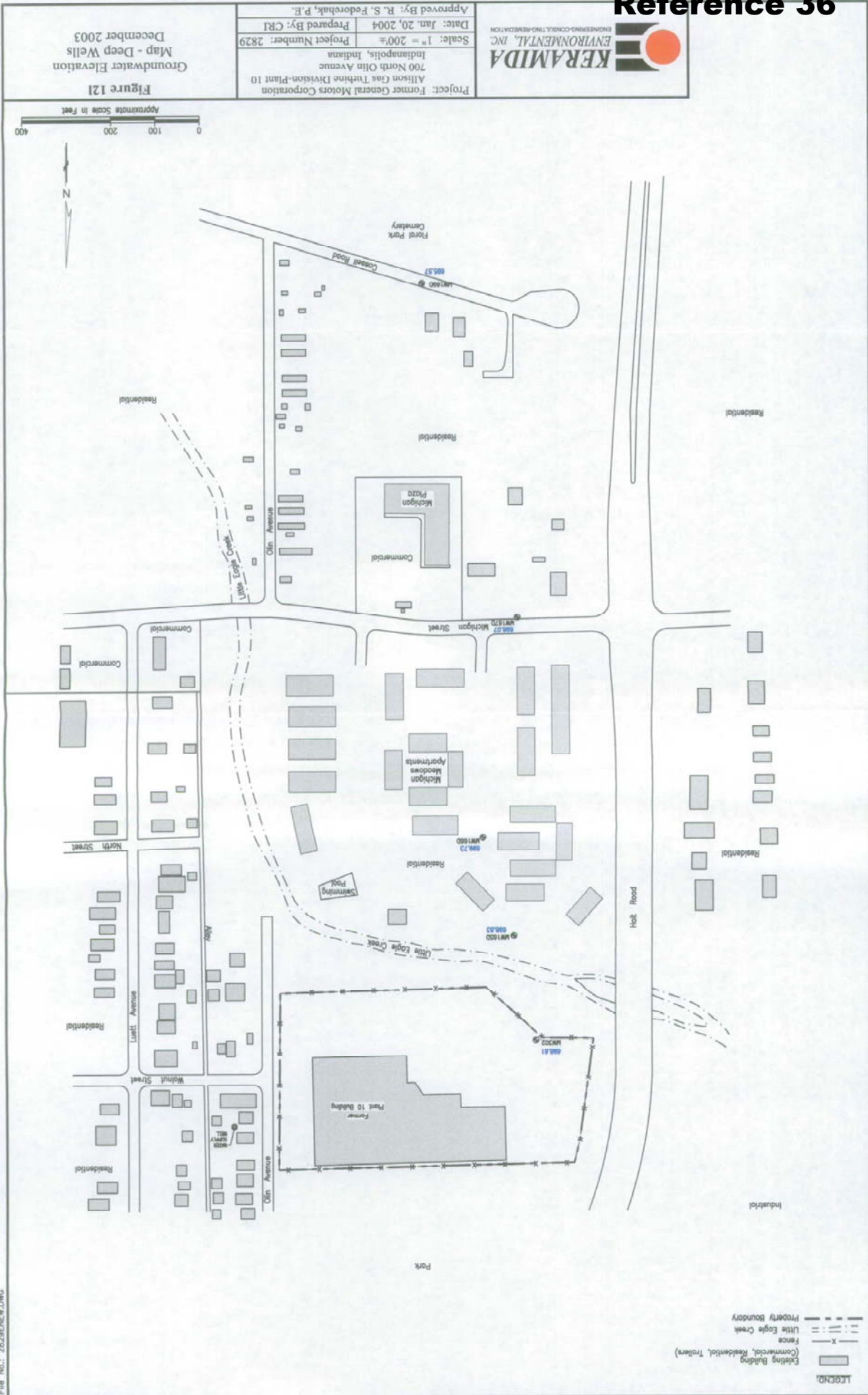


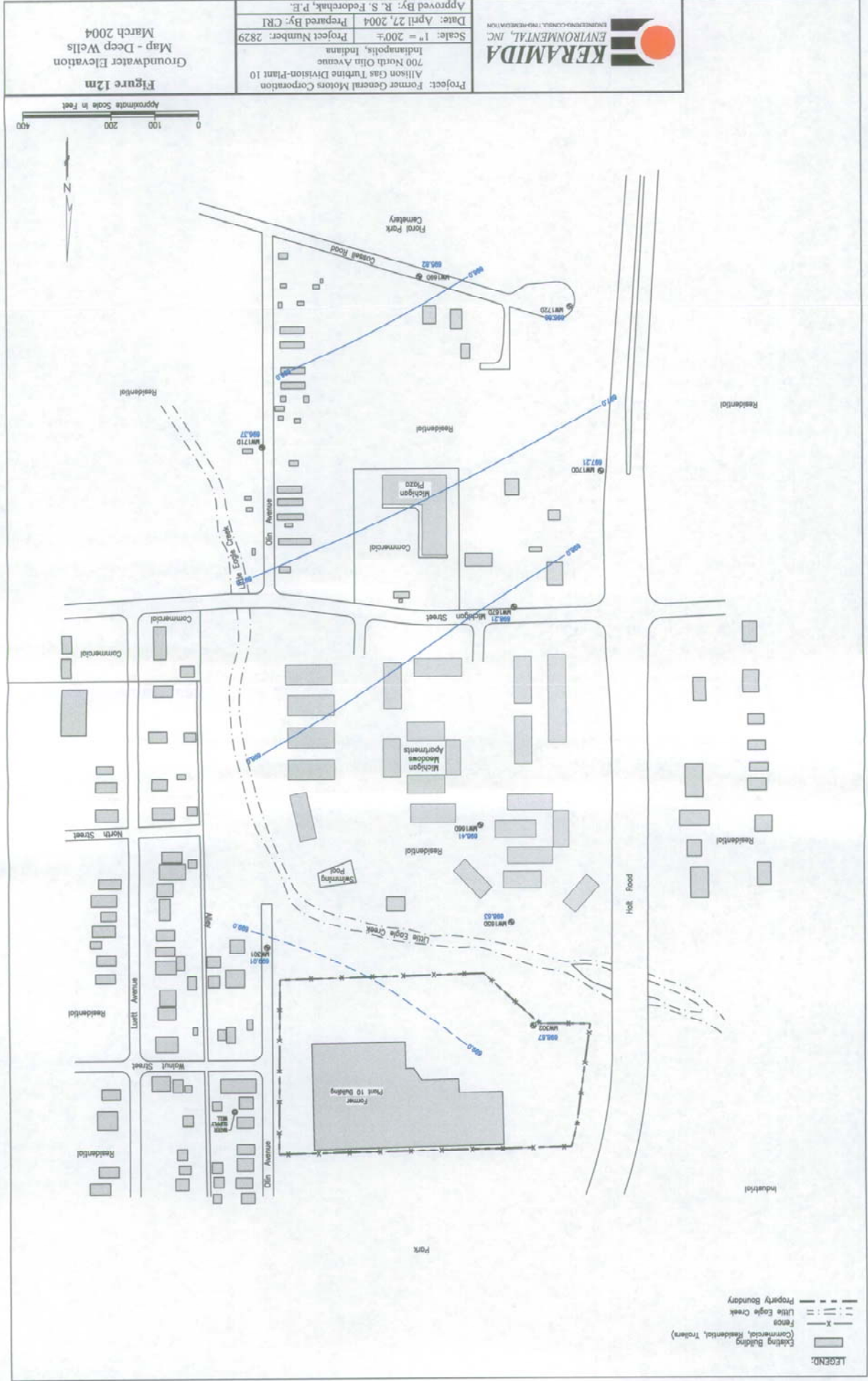


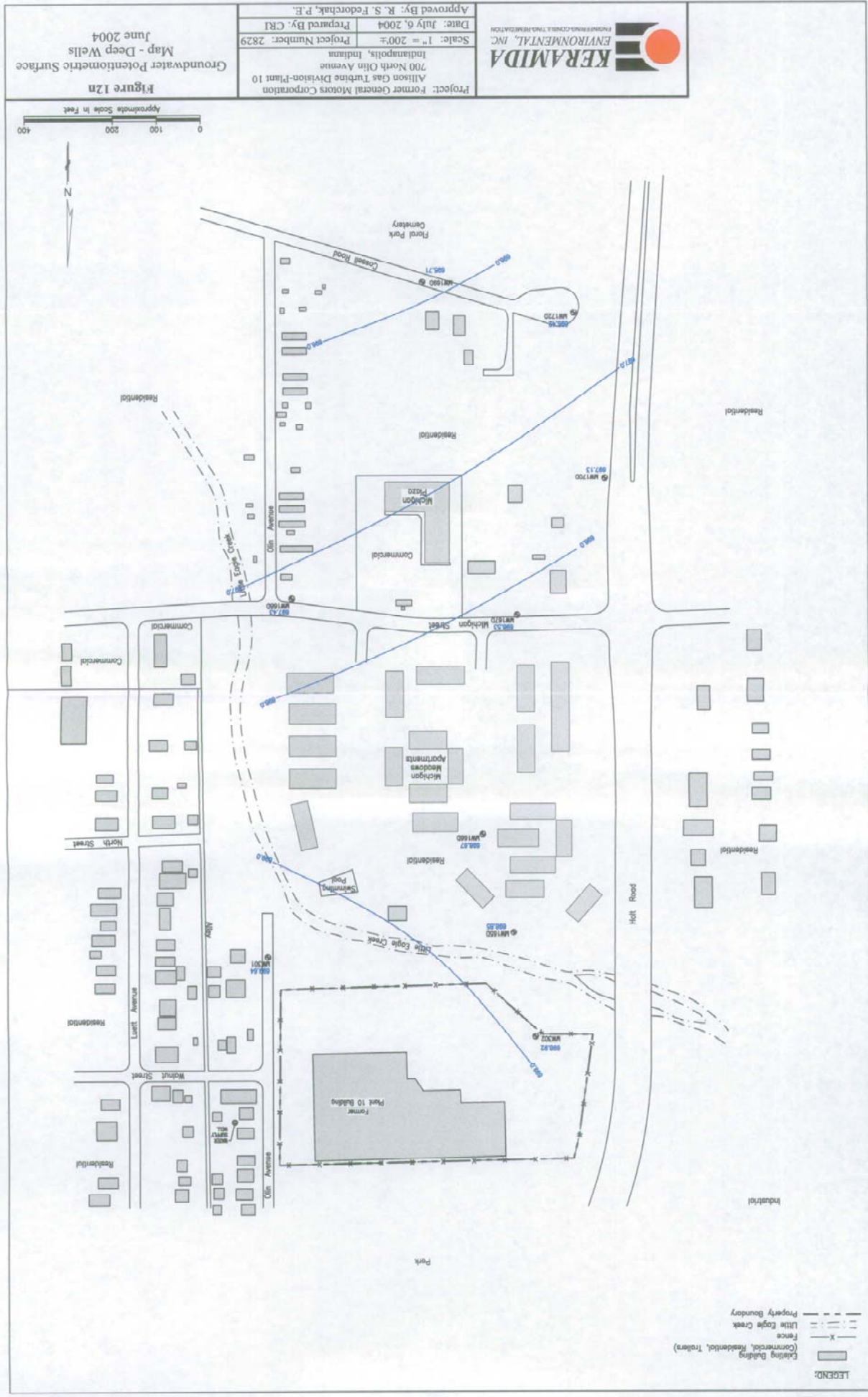


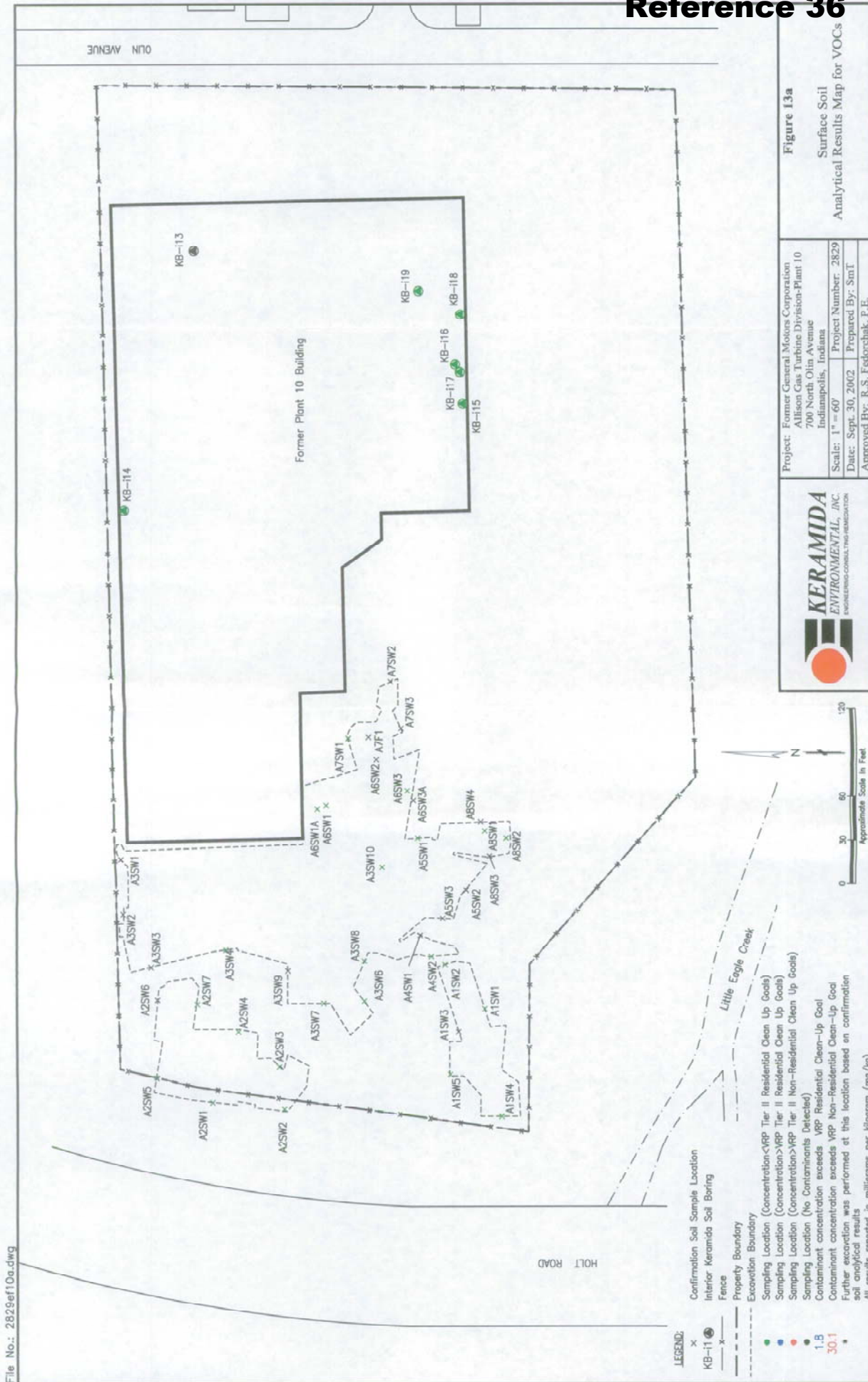




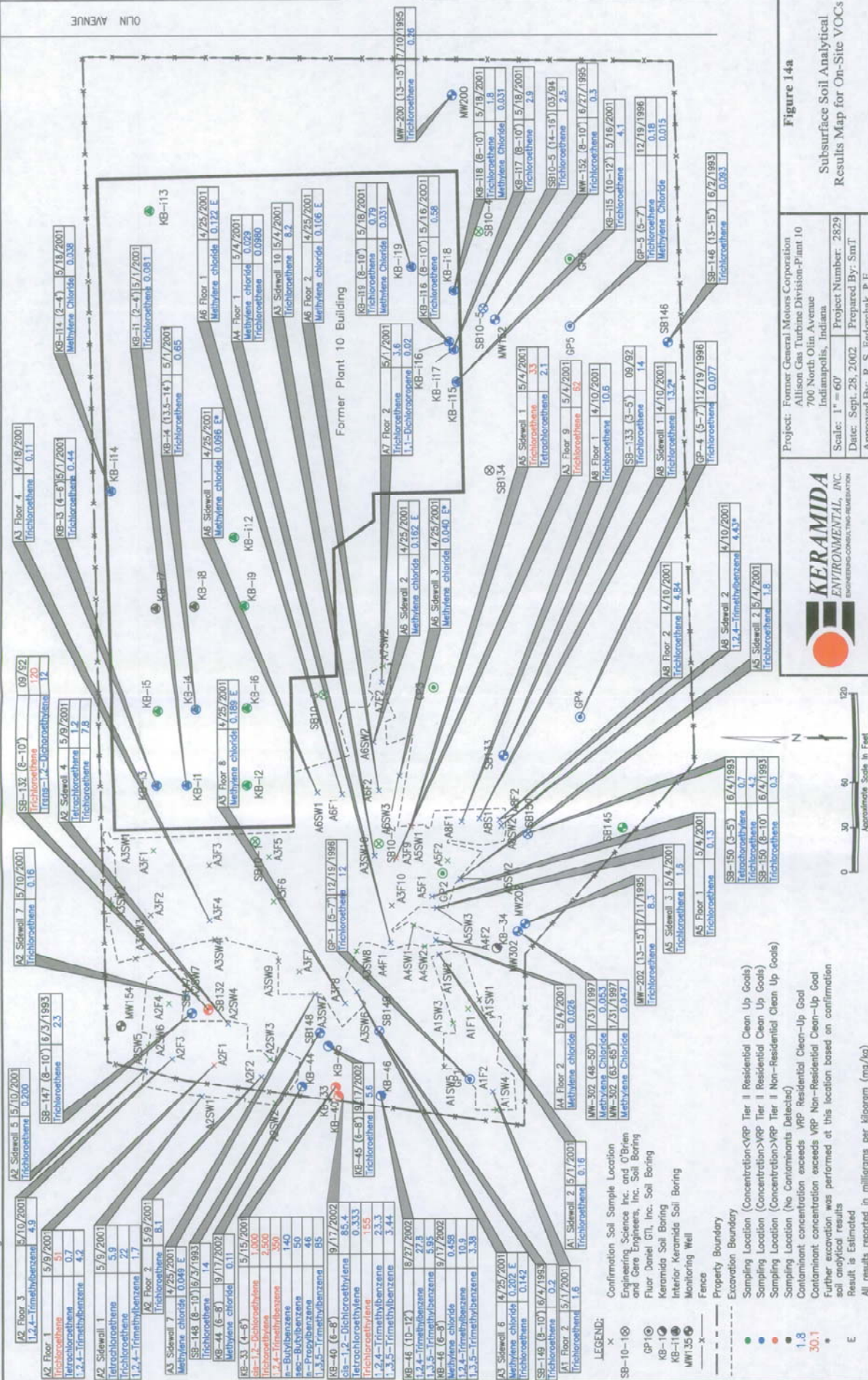




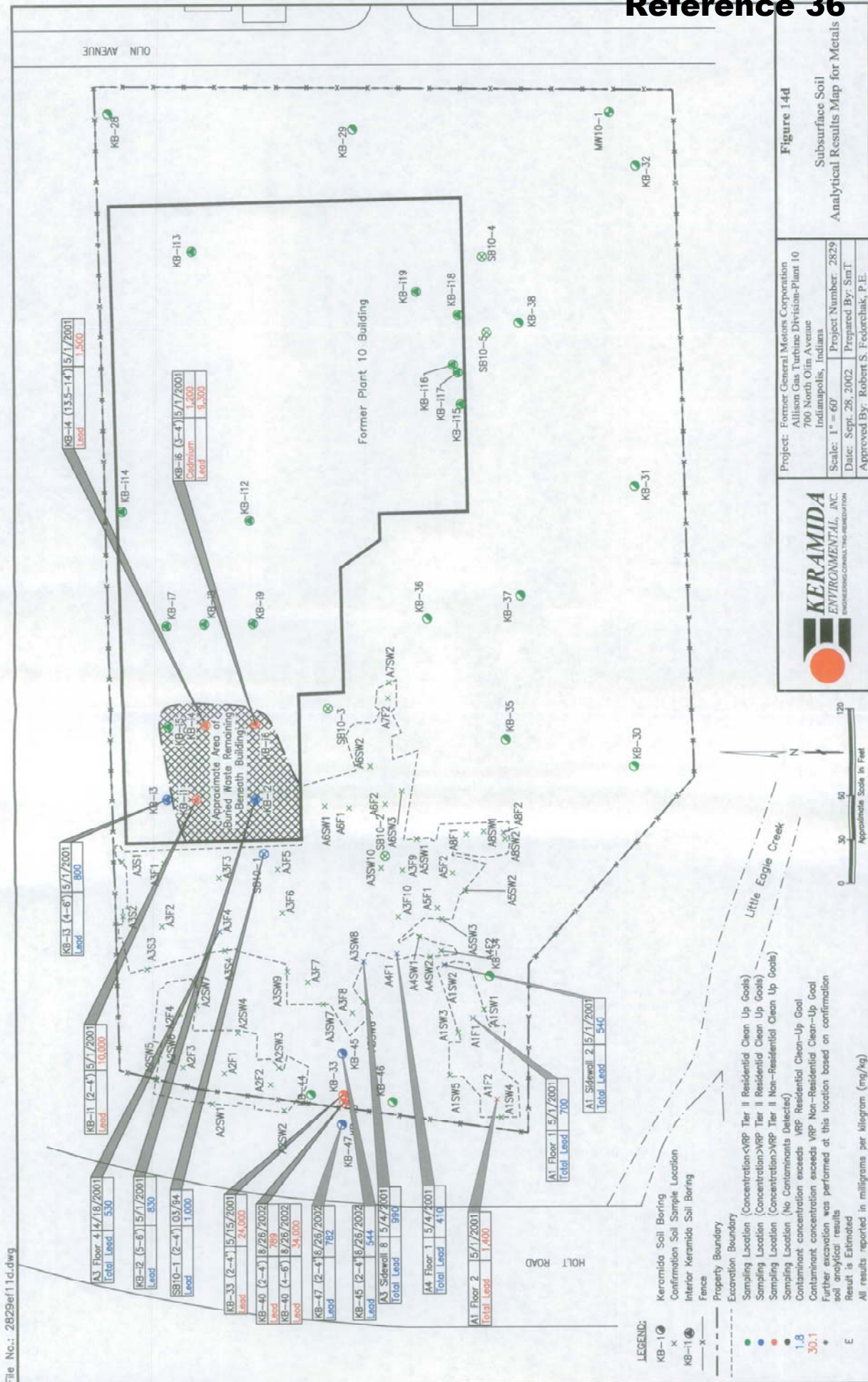


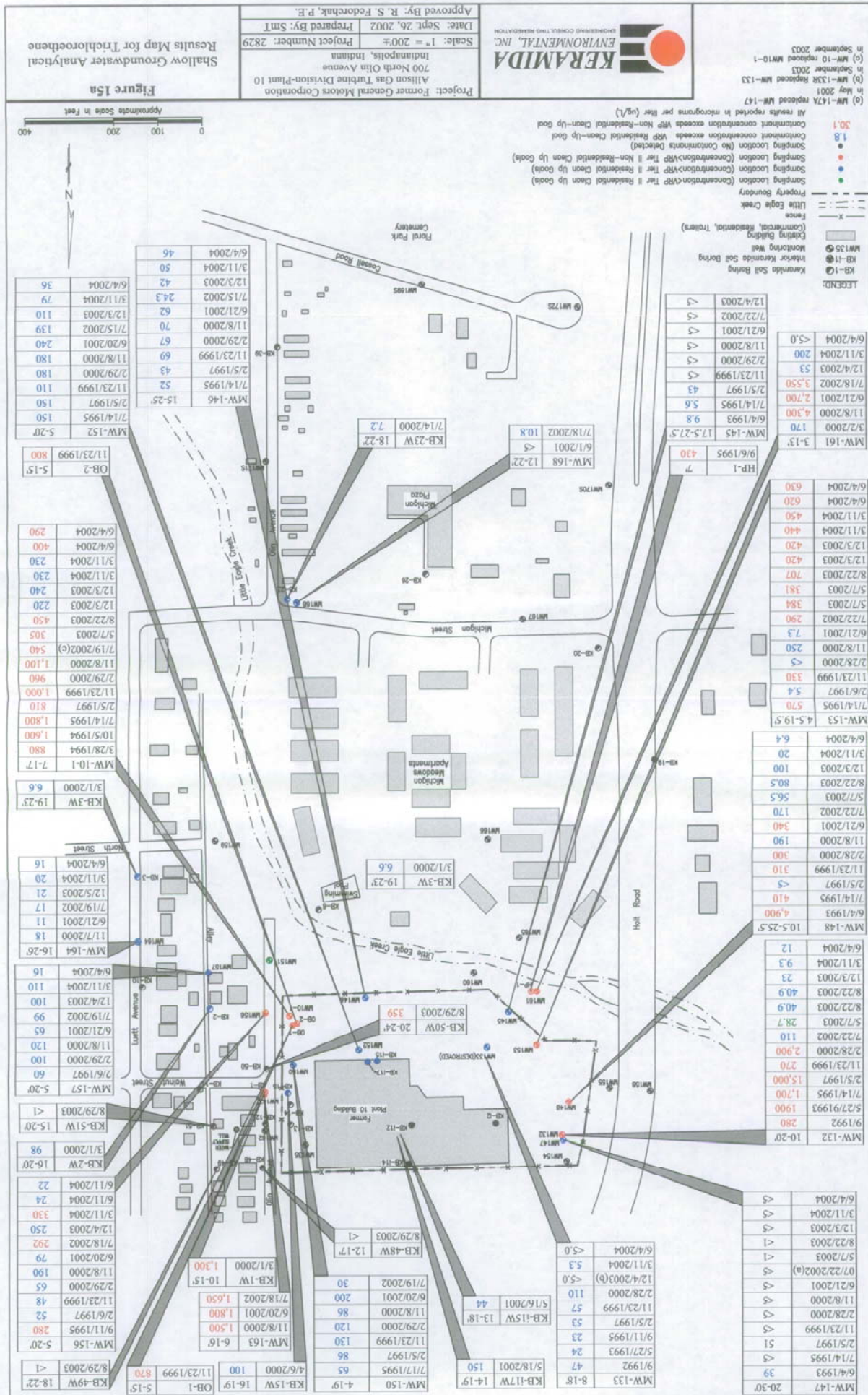


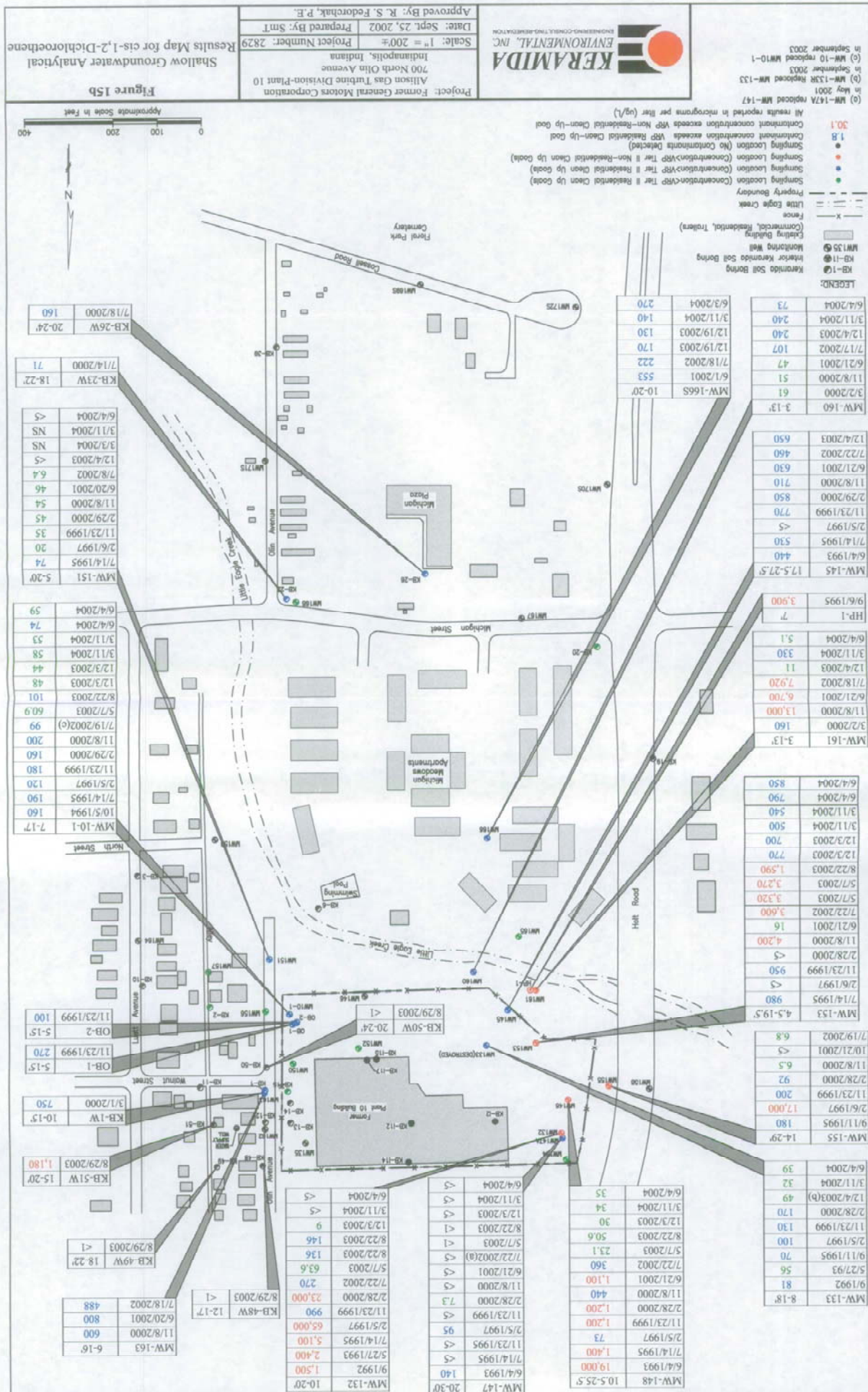
File No.: 2829ef11a.dwg

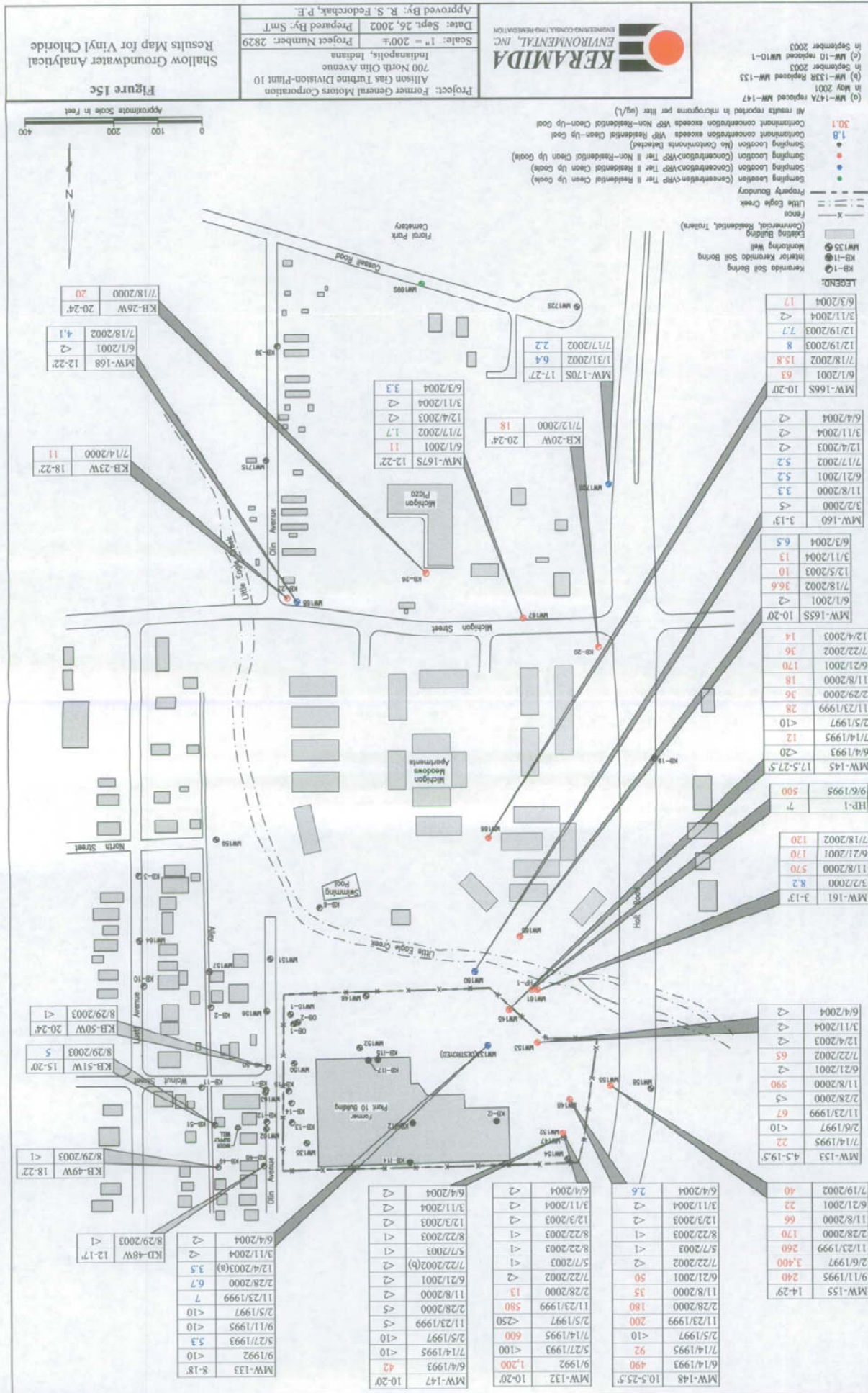


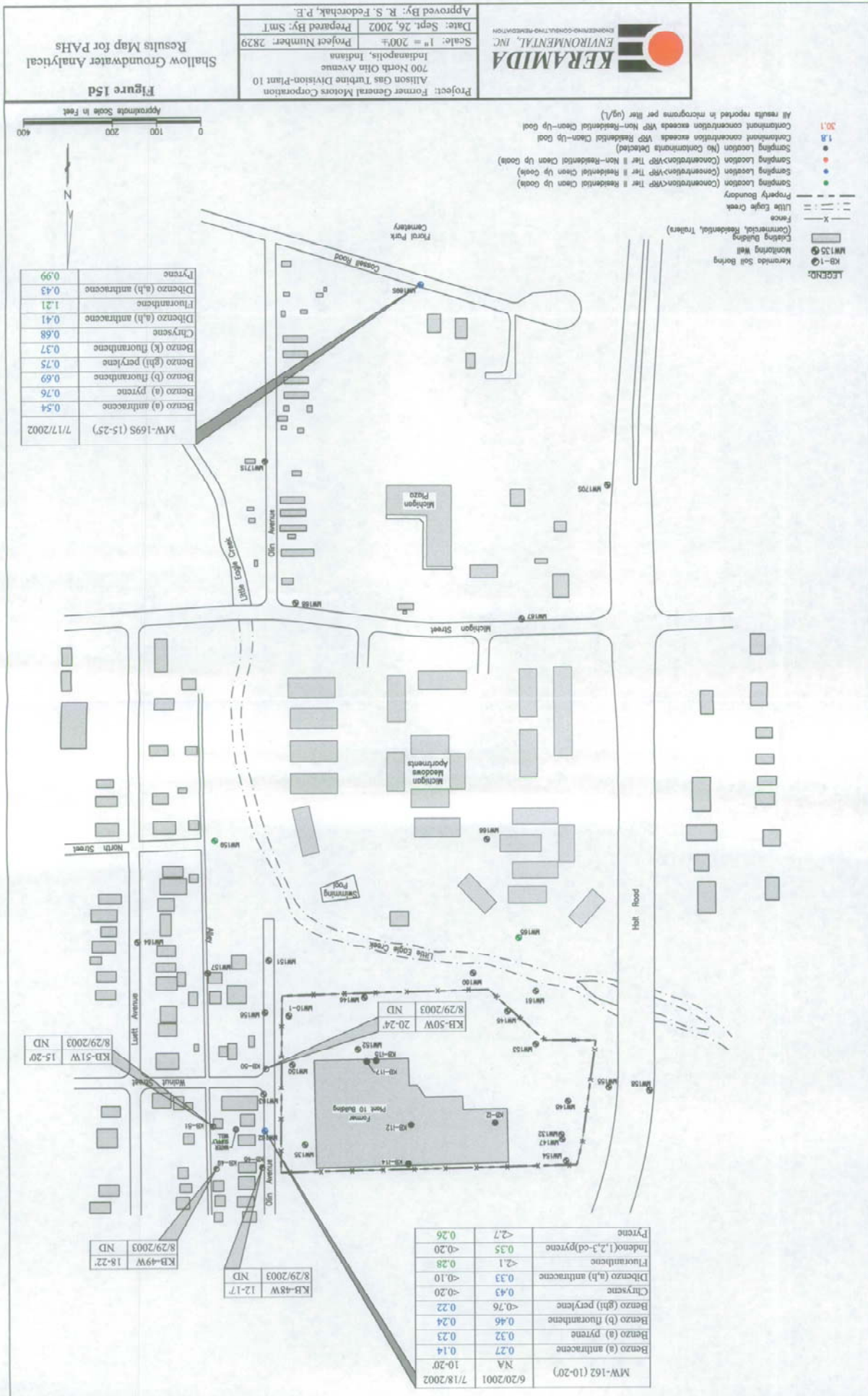




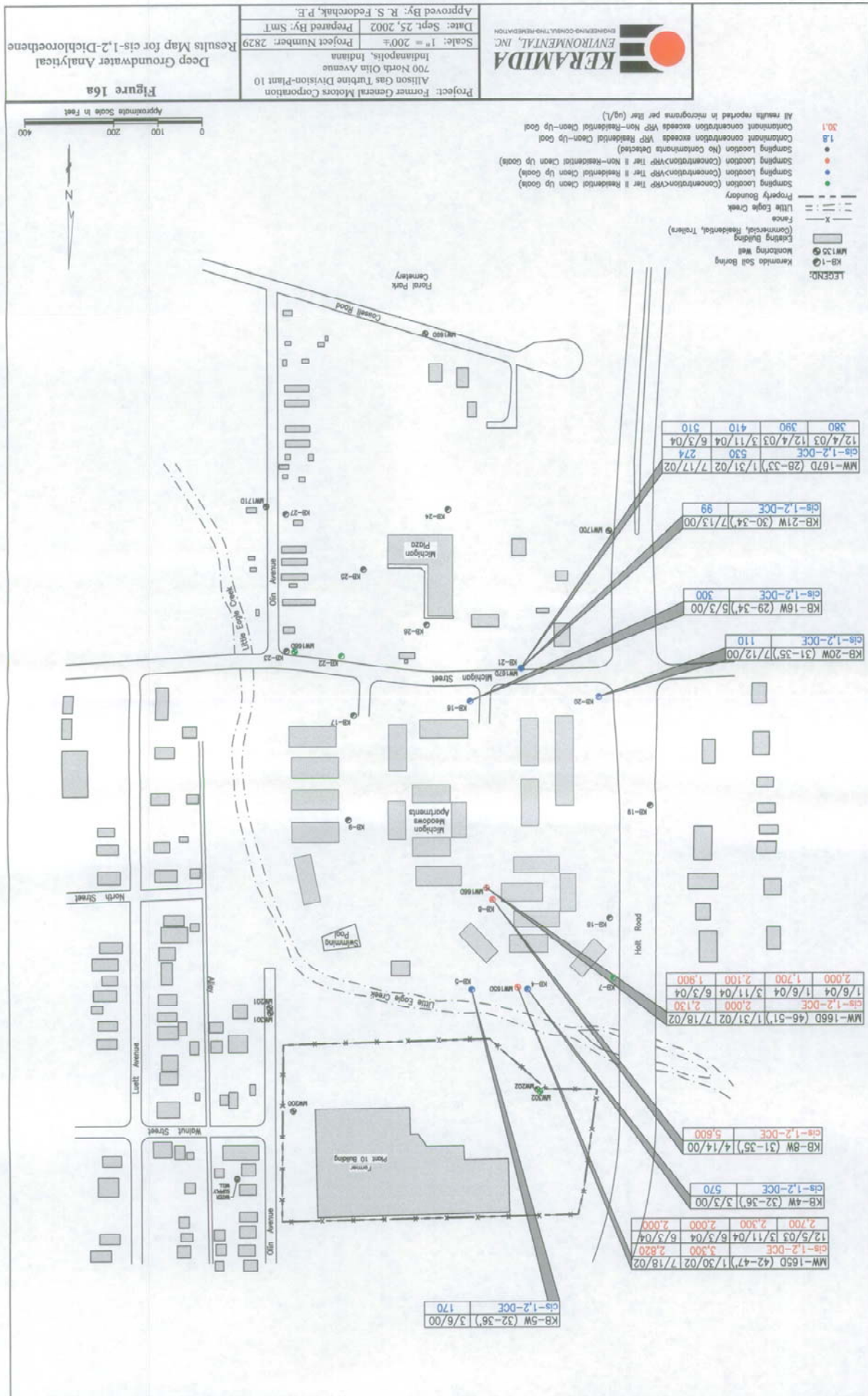


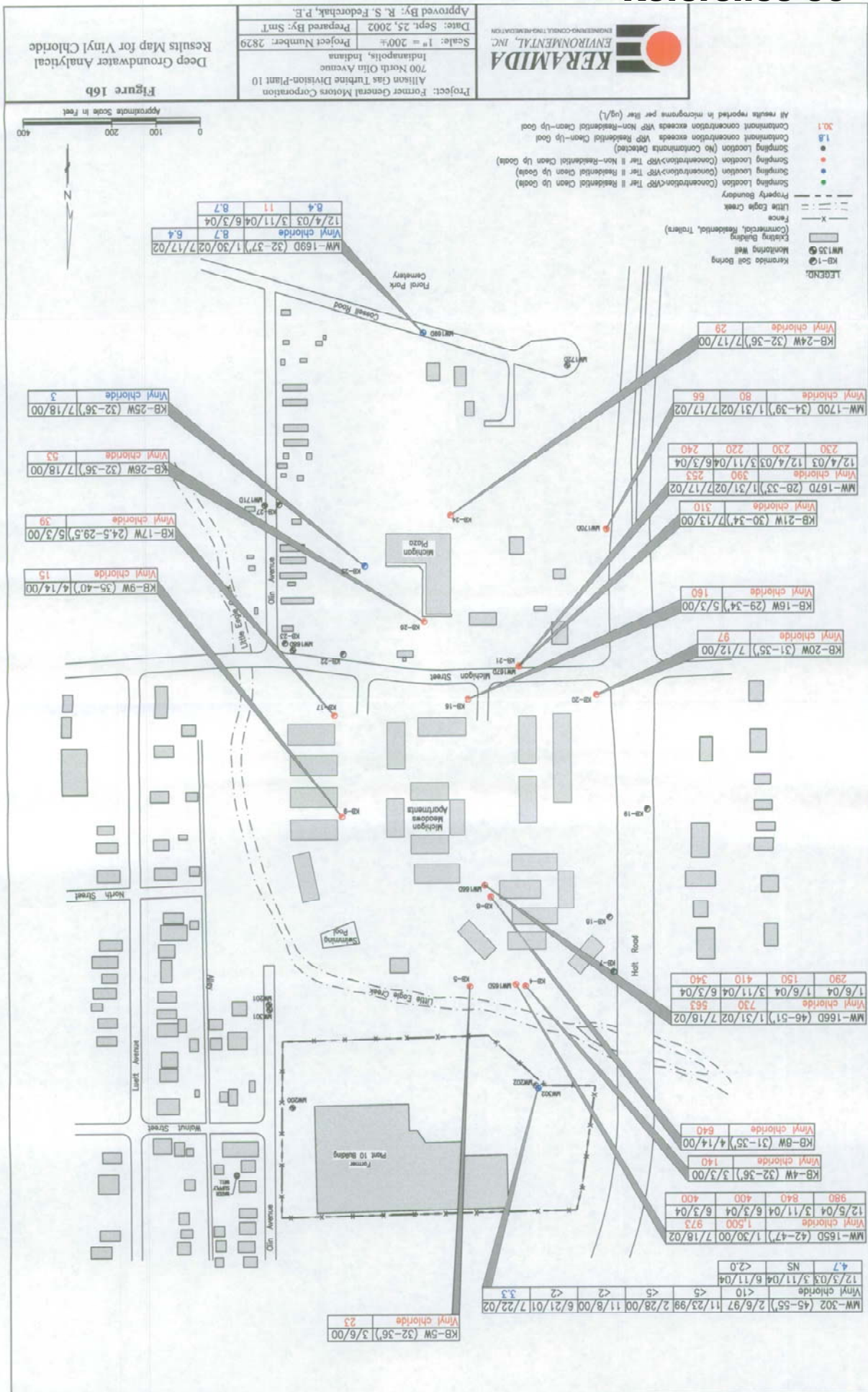


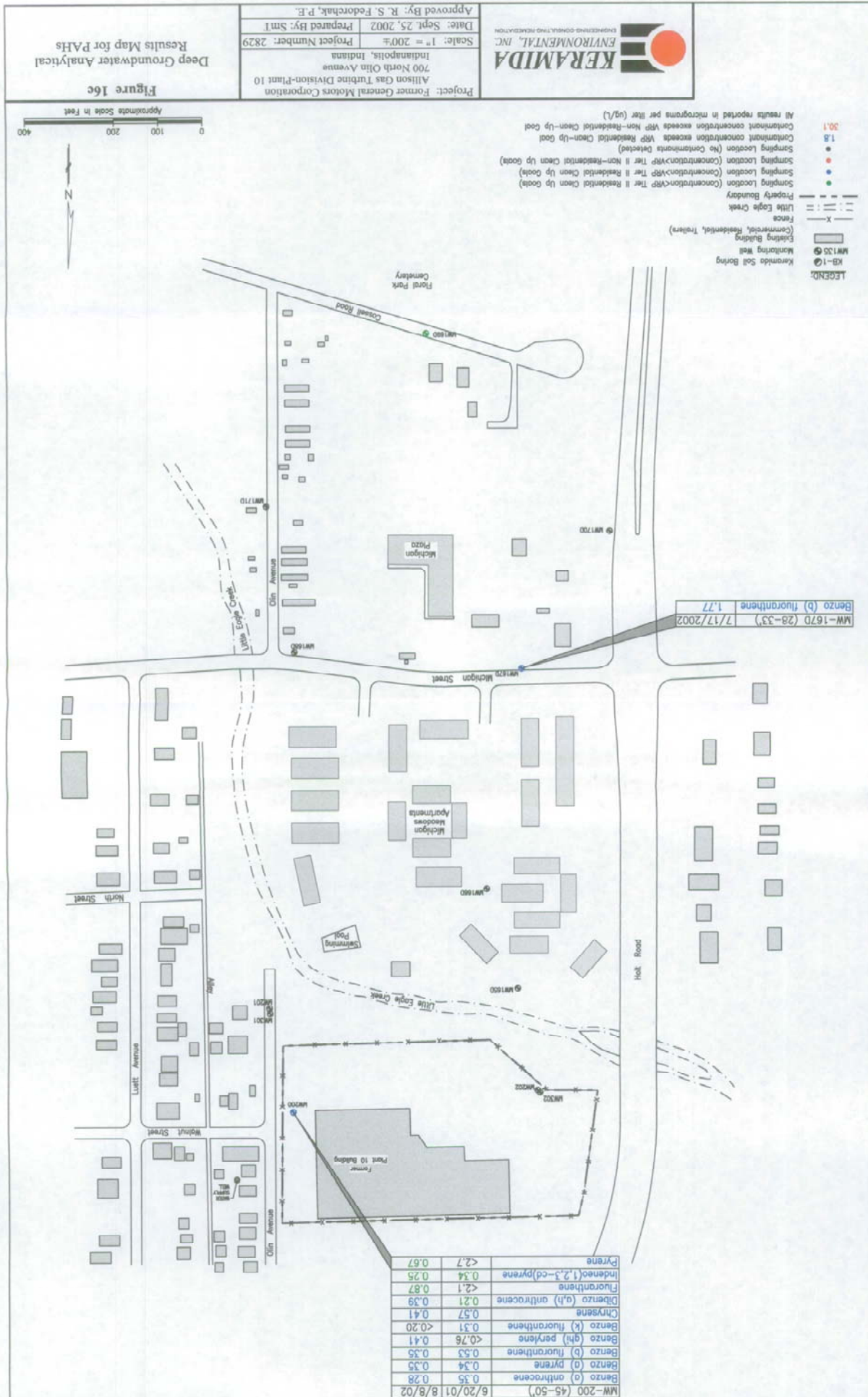


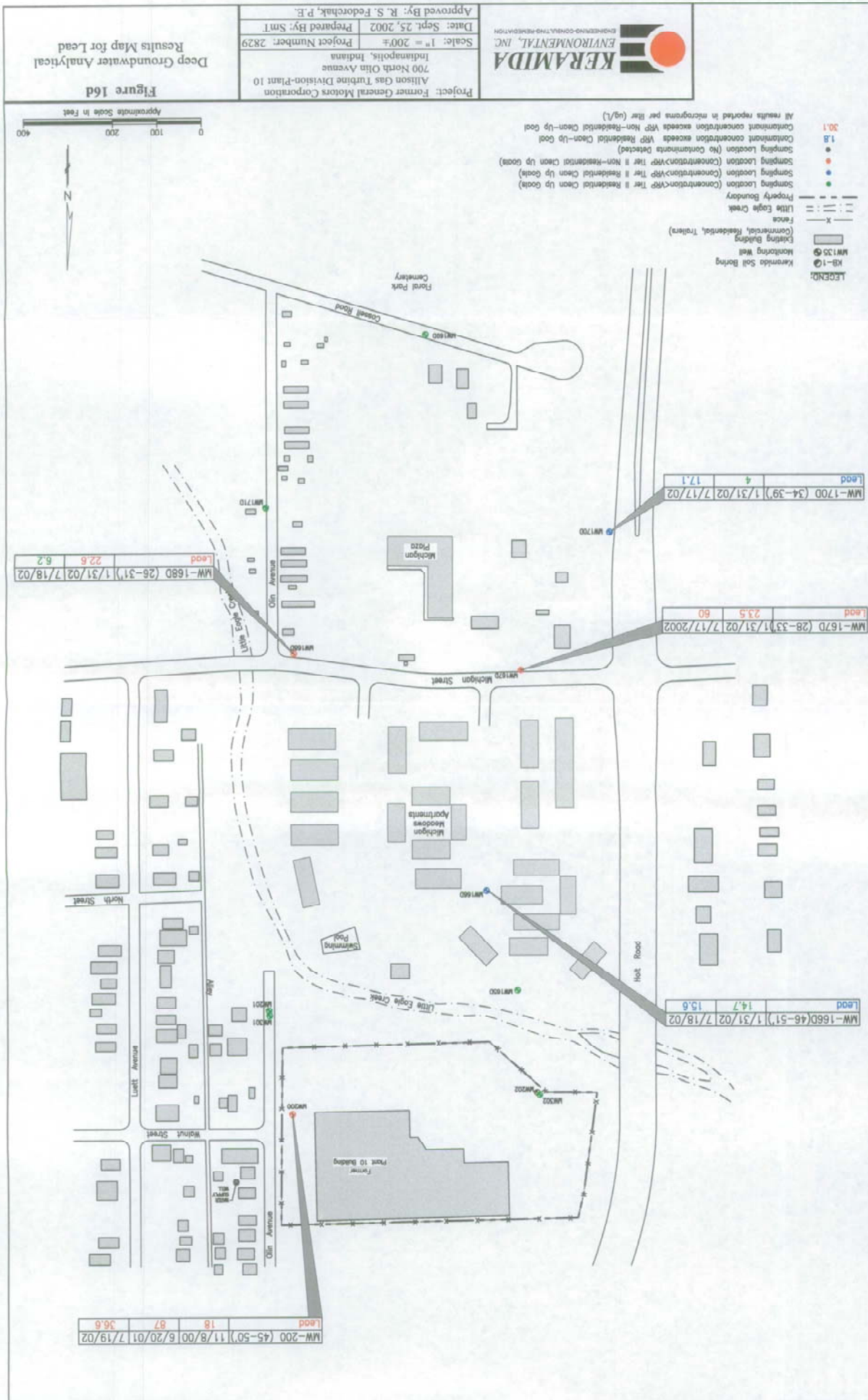








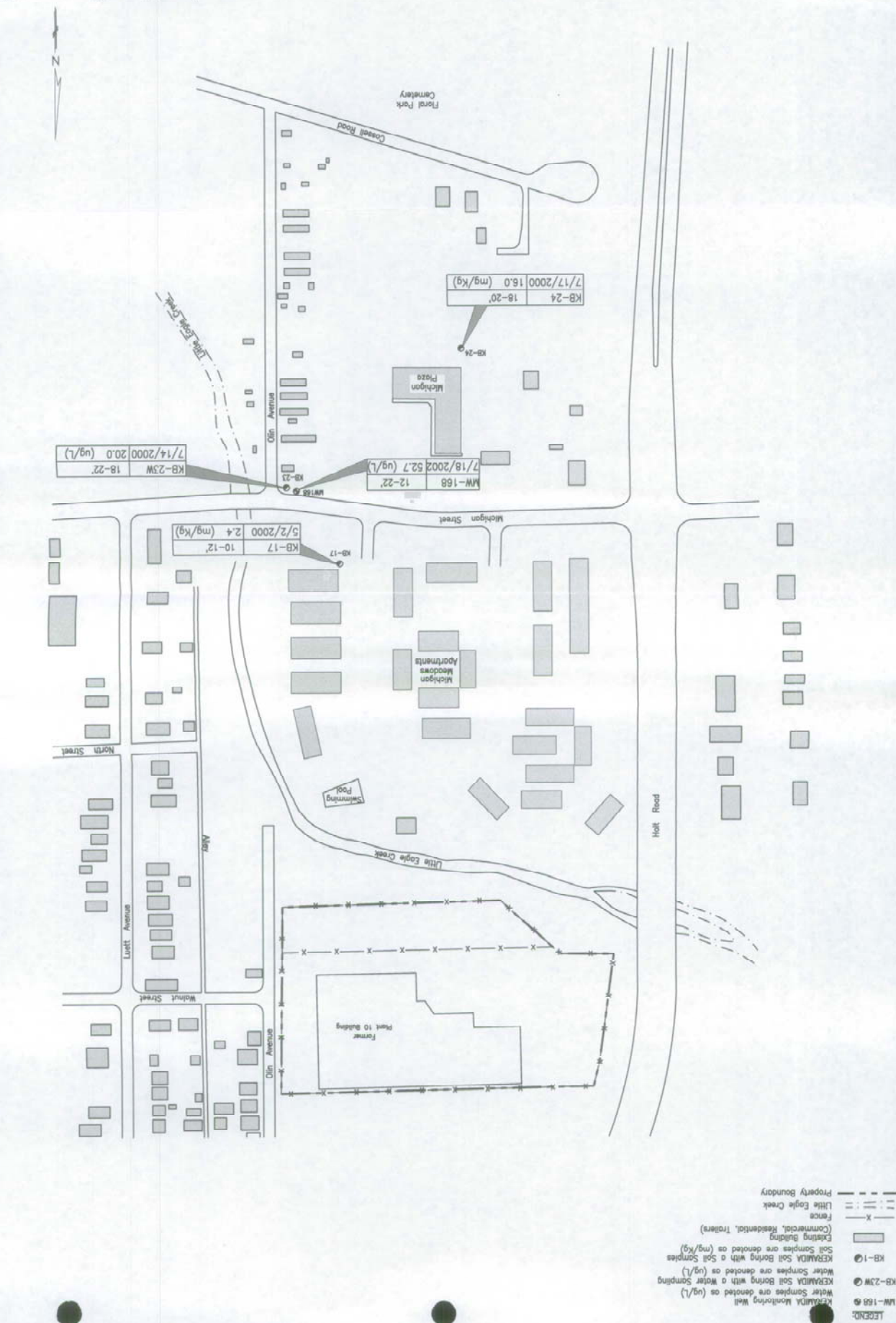






PCE in Off-Site Groundwater and Soil Analytical Summary Map

A horizontal number line labeled "Approximate Scale in Feet". The line has tick marks at 0, 100, 200, and 400. The numbers are written below the line, and the line itself is a thick horizontal bar.



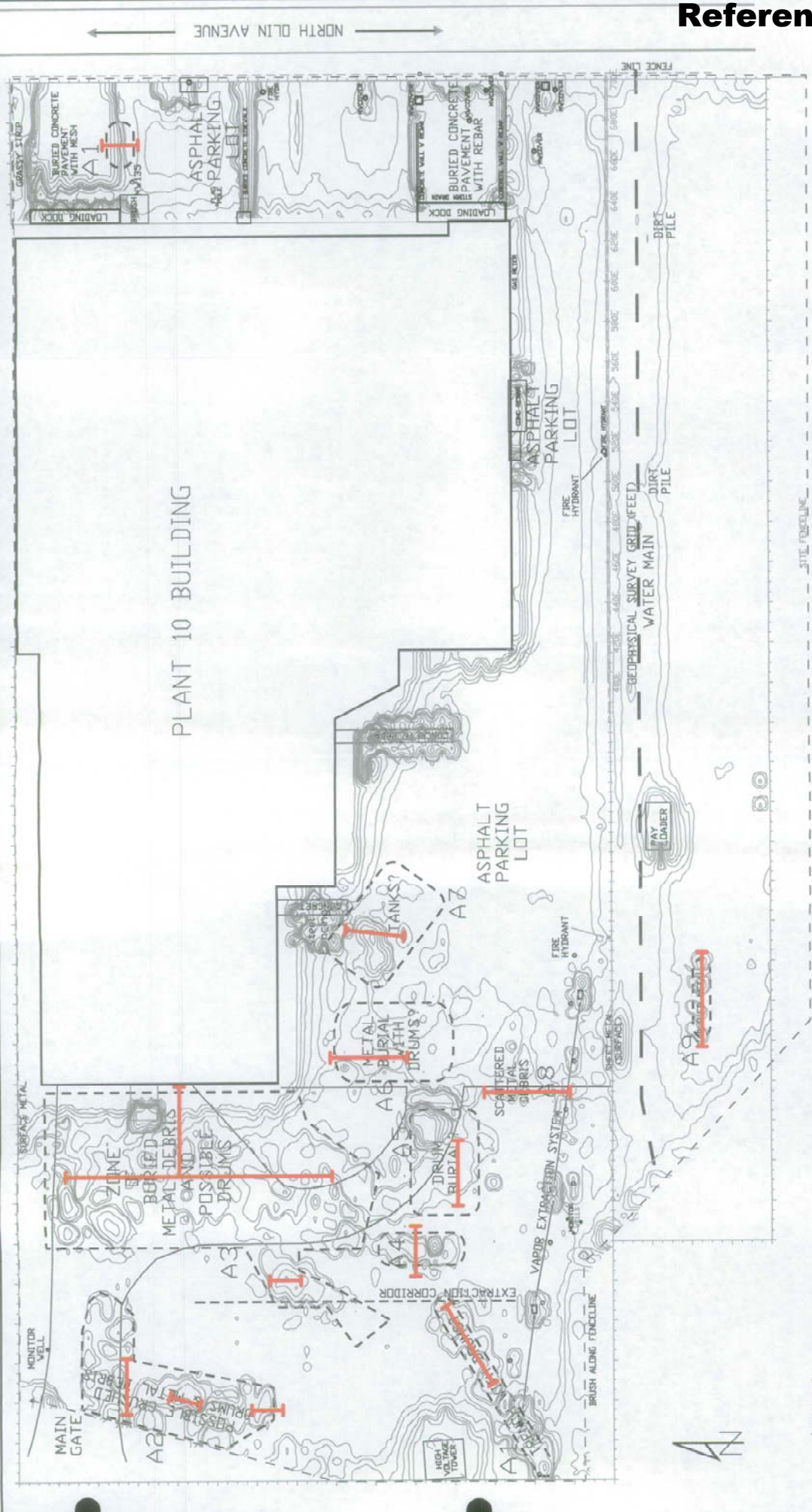


Figure 19
Geophysical Data Source Geophysical Survey For buried materials at Allison Engine Company Plant 10 Site. Geosphere, Inc. September 2000

Project: Former General Motors Corporation
Allison Gas Turbine Division-Plant 10
700 North Olin Avenue
Indianapolis, Indiana

Scale: 1" = 100'
Date: Sept. 25, 2002
Project Number: 2829E
Prepared By: MHJ
Approved By: R.S. Fedorchak, P.E.

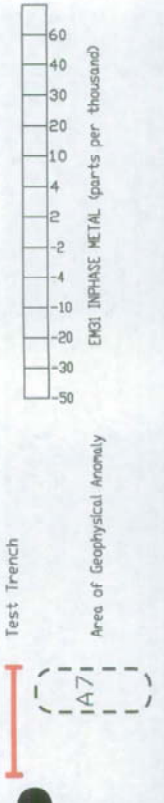
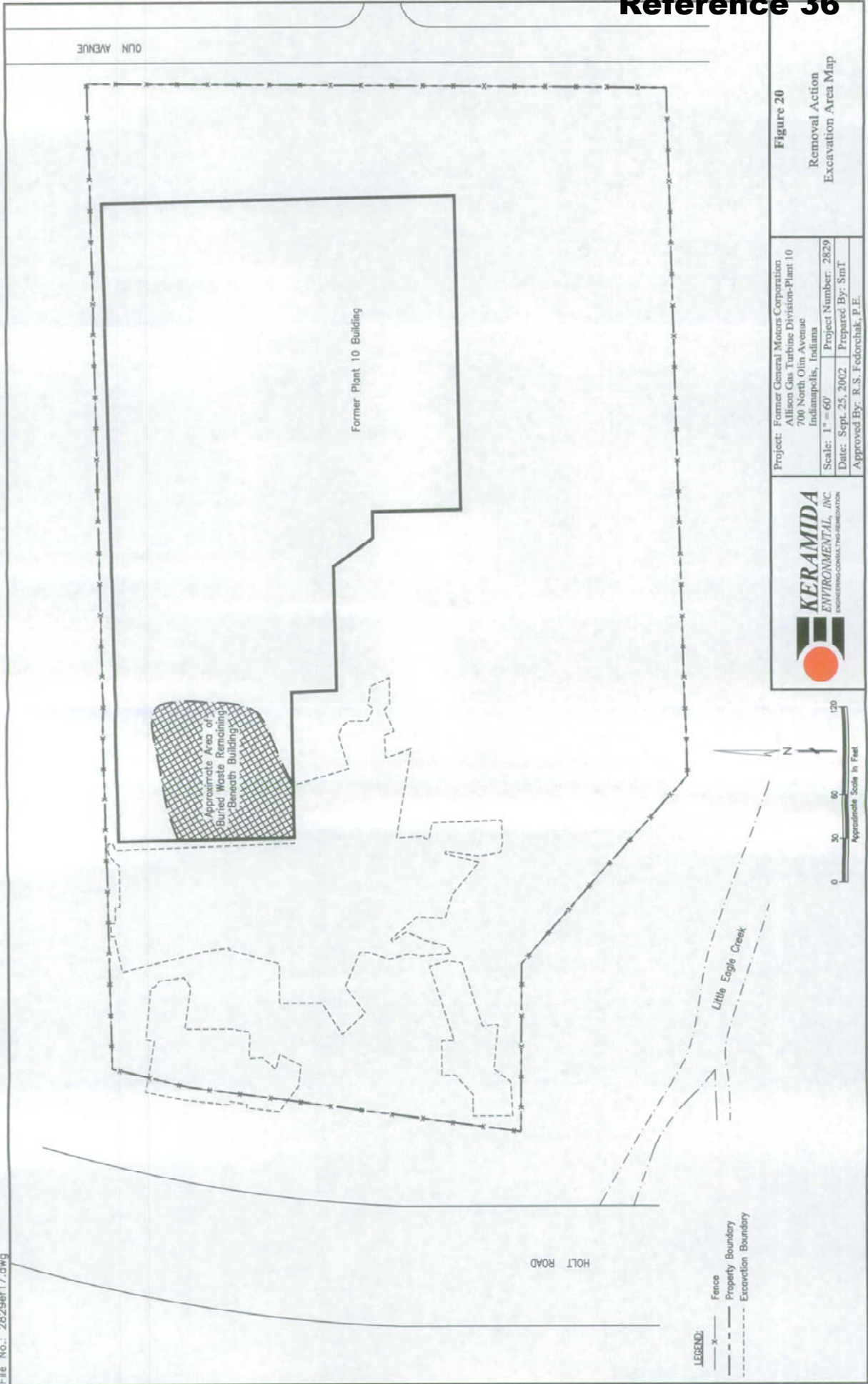


Figure 19
Geophysical Anomalies and Test
Trench Location Map

File No.: 2829ef17.dwg





LEGEND

- 6-inch diameter, Schedule 40 PVC, Soil Vapor Extraction Piping
- 25-inch diameter, Schedule 40 PVC, Air Sparging Piping
- 2-inch square, 304 Stainless Steel, Lockable Valve
- 2-inch square, 304 PVC, Soil Vapor Extraction Piping
- ▲ 2-inch square, 304 PVC, Soil Vapor Extraction Piping
- ◆ Schedule 40 PVC Control Valve with a 18-inch diameter
- ◆ Schedule 40 PVC Control Valve with a 24-inch S&T
- ◆ But Down Cover or 2 Foot Square, Steel, Lockable Vault Box
- ◆ 2-inch square, 304 PVC, Soil Vapor Extraction Piping
- ◆ Schedule 40 PVC Control Valve with a 3 Foot Square, Lockable
- ◆ Vault Box
- ◆ Schedule 40 PVC (Only) Valve, Applied Air Sparging Unit
- ◆ 1-inch diameter, Schedule 40 PVC (Flow/Throttle) Hose Control Piping/Valving/Reducers with ASFA
- ◆ Injection Water Line and Sprinklers

Figure 22a
TCE vs. Time
Reductive Dechlorination Bench Test
Allison Gas Turbine Division Plant 10
Indianapolis, Indiana
KERAMIDA Project #2829E

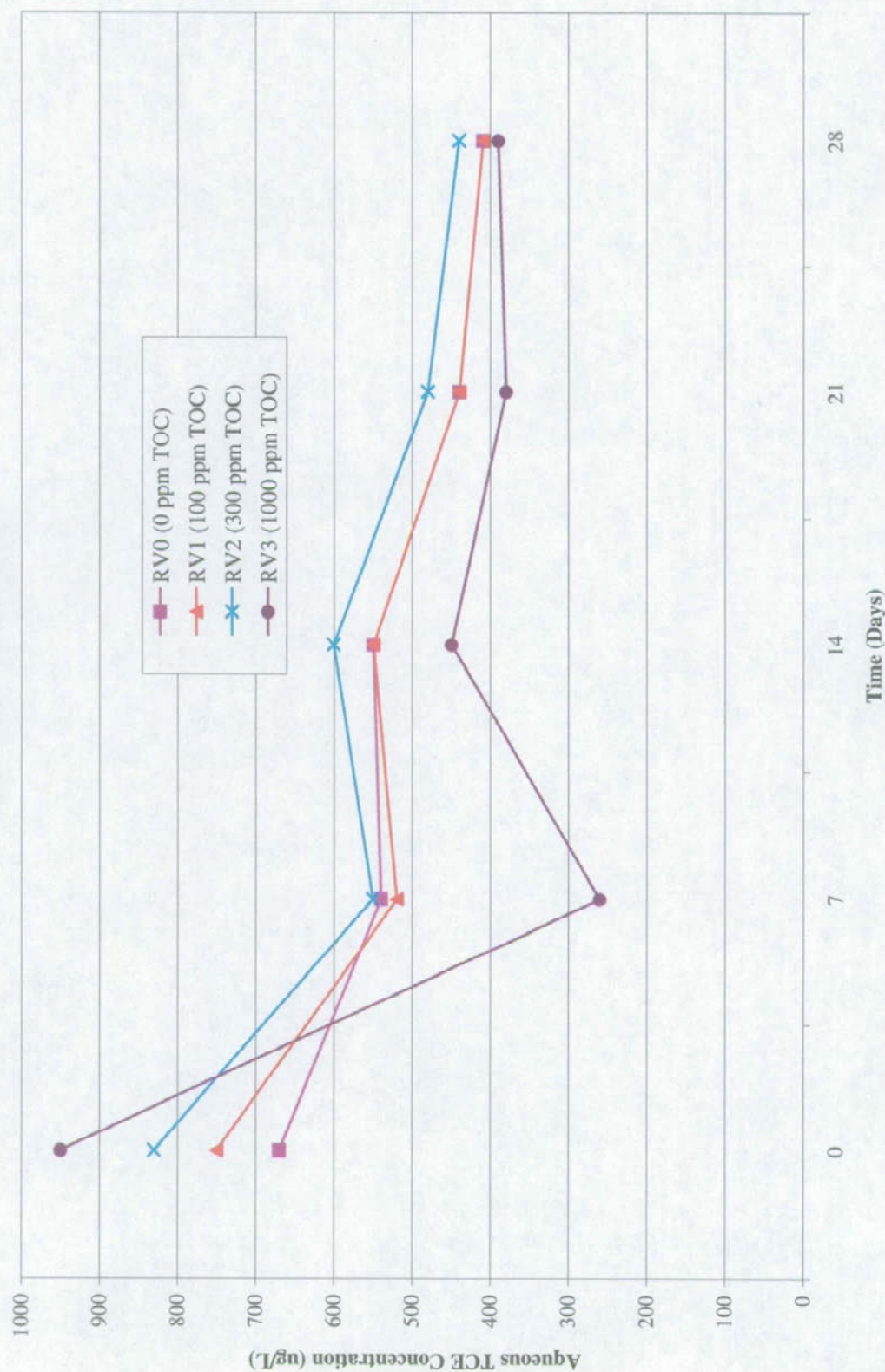


Figure 22b
Initial Aqueous TCE vs. TOC
Reductive Dechlorination Bench Test
Allison Gas Turbine Division Plant 10
Indianapolis, Indiana
KERAMIDA Project #2829E

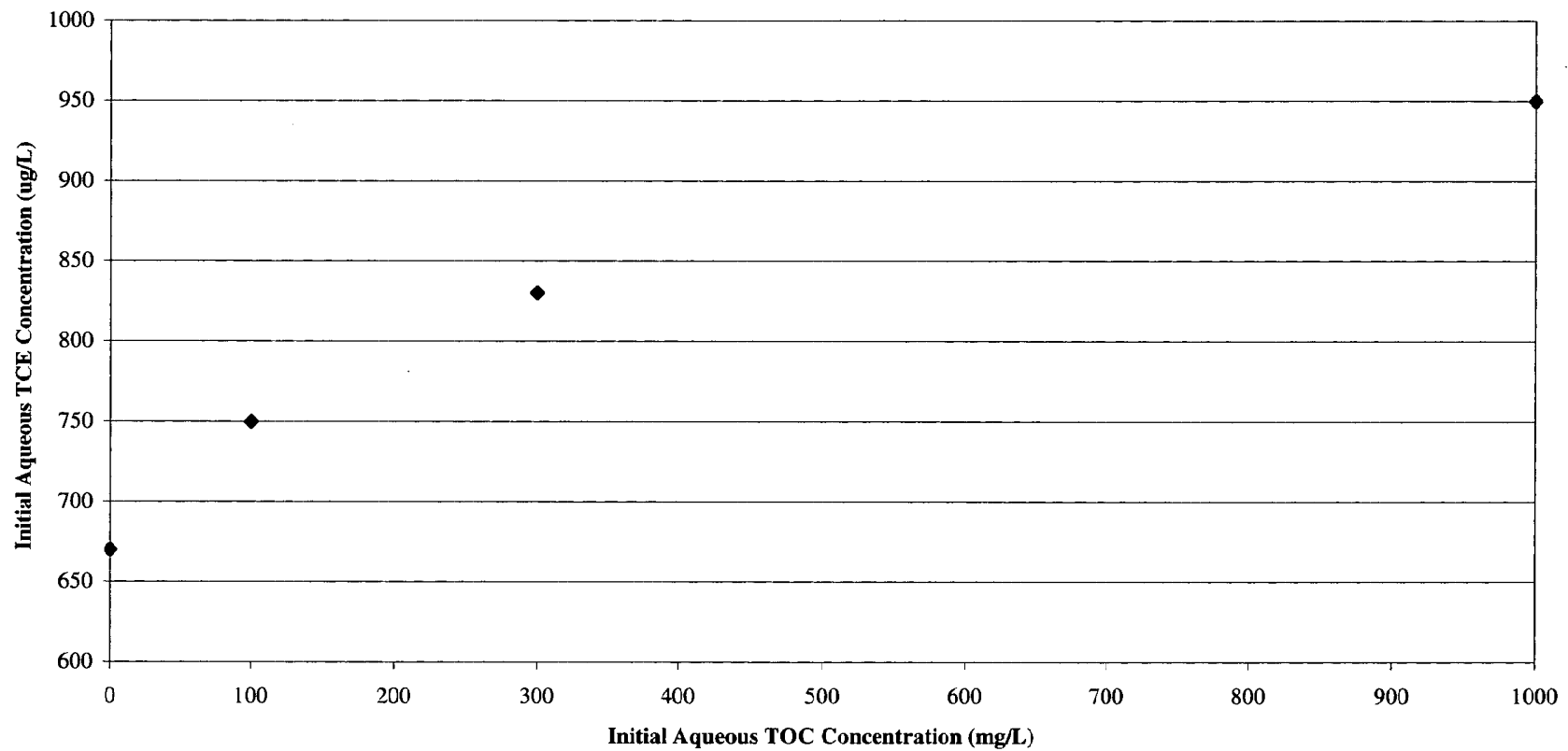
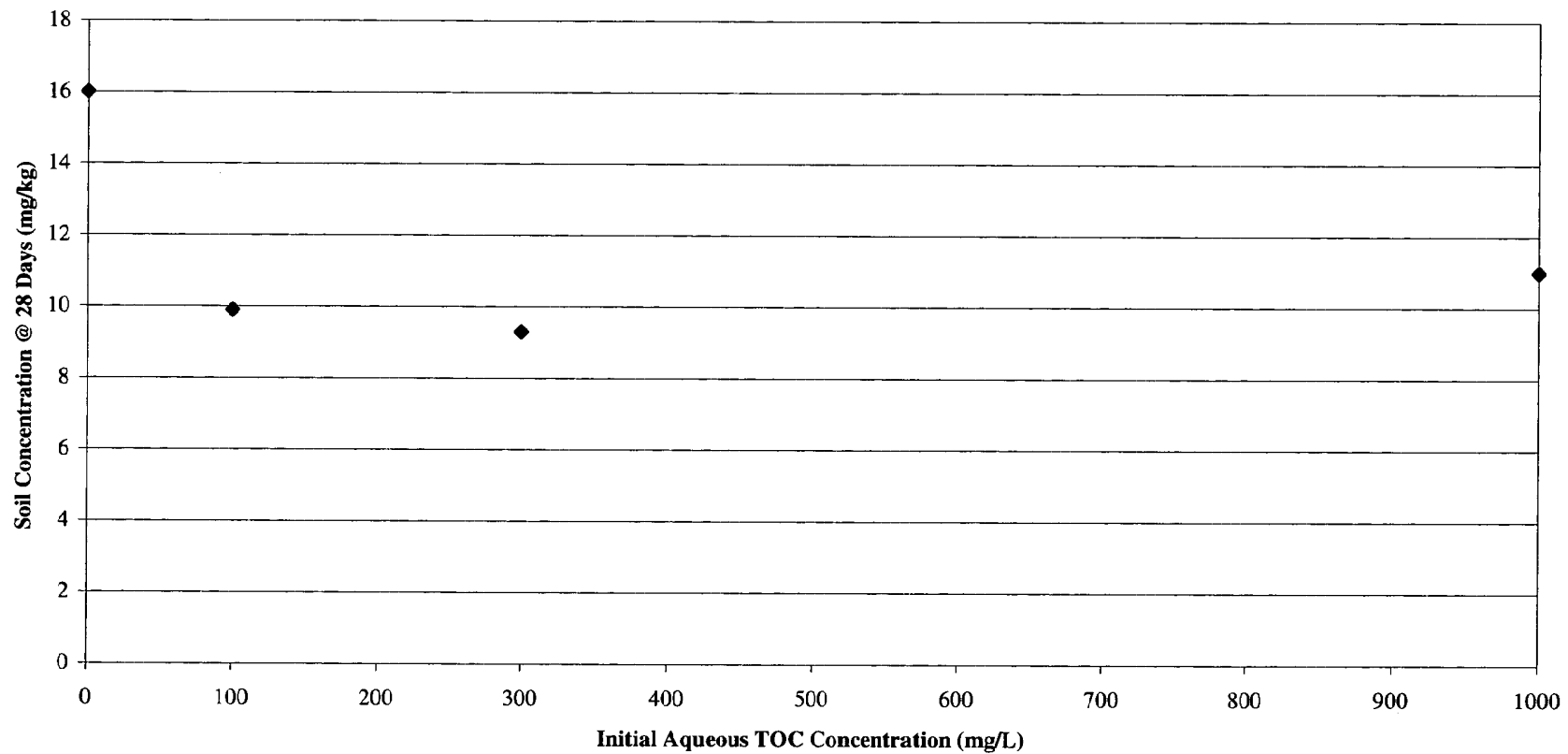


Figure 22c
Final Soil TCE vs. TOC
Reductive Dechlorination Bench Test
Allison Gas Turbine Division Plant 10
Indianapolis, Indiana
KERAMIDA Project #2829E



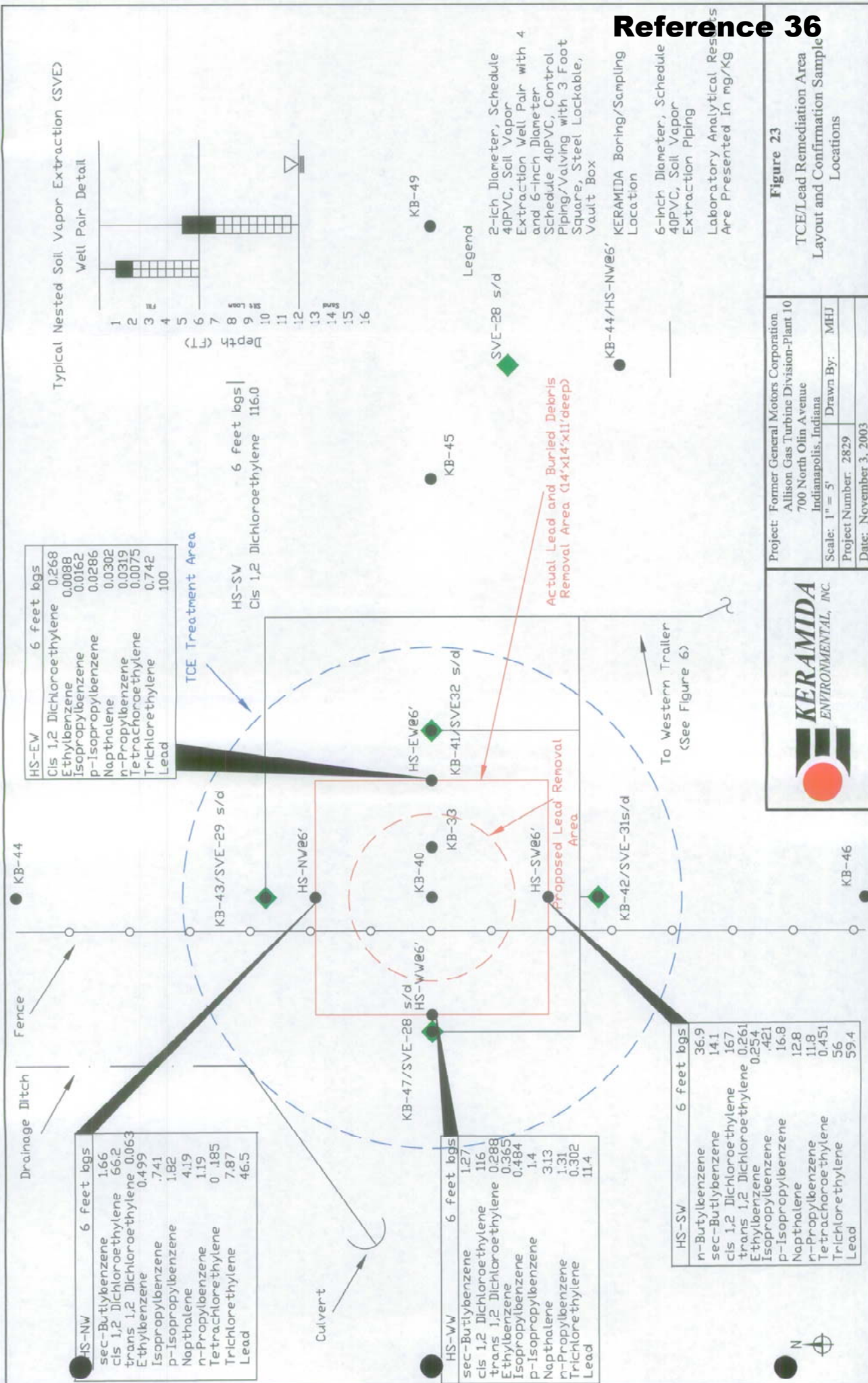




Figure 25
Detailed Project Schedule
Allison Gas Turbine Division Plant 10
Indianapolis, Indiana
IDEM VRP #6991004
KERAMIDA Project No. 2829E

[illegible]